UNIVERSITY OF TORONTO

3 1761 01003329 8

Baker, Charles Whiting
Government control and
operation of industry in Great
Britain and the United States
during the World War

HD
3616
G72
B3

~~WITHDRAWN~~

Carnegie Endowment for International Peace

DIVISION OF ECONOMICS AND HISTORY

JOHN BATES CLARK, DIRECTOR

PRELIMINARY ECONOMIC STUDIES OF THE WAR

EDITED BY

DAVID KINLEY

President of the University of Illinois
Member of Committee of Research of the Endowment

No. 18

GOVERNMENT CONTROL AND OPERATION OF INDUSTRY IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR

BY

CHARLES WHITING BAKER, C. E.

Consulting Engineer

NEW YORK

OXFORD UNIVERSITY PRESS

AMERICAN BRANCH: 35 WEST 32ND STREET

LONDON, TORONTO, MELBOURNE AND BOMBAY

1921

Carnegie Endowment for International Peace

DIVISION OF ECONOMICS AND HISTORY

JOHN BATES CLARK, DIRECTOR

PRELIMINARY ECONOMIC STUDIES OF THE WAR

EDITED BY

DAVID KINLEY

President of the University of Illinois

Member of Committee of Research of the Endowment

No. 18

GOVERNMENT CONTROL AND OPERATION OF INDUSTRY IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR

BY

CHARLES WHITING BAKER, C. E.

Consulting Engineer

NEW YORK

OXFORD UNIVERSITY PRESS

AMERICAN BRANCH: 35 WEST 32ND STREET

LONDON, TORONTO, MELBOURNE AND BOMBAY

1921

12
3616
G-63

JUN

COPYRIGHT 1921
BY THE
CARNEGIE ENDOWMENT FOR
INTERNATIONAL PEACE
2 JACKSON PLACE
WASHINGTON, D. C.

11-

THE RUMFORD PRESS
CONCORD

EDITOR'S PREFACE

The present study by the Honorable Charles Whiting Baker concerns itself with the government administration of the industrial life of Great Britain and the United States during the war. Mr. Baker's verdict on the organization and conduct of the various industrial activities undertaken by the government for war purposes is, on the whole, favorable. With this opinion most of our people will very likely agree. Indeed, the editor is doubtful of the correctness of Mr. Baker's opinion concerning the views of the so-called conservative or middle class on this matter. On the contrary, the editor believes that the great majority of our people of all classes would say "yes" to the question whether the government administration of such industrial activities as it took over was not good for war purposes under the conditions and circumstances that prevailed while the war was in progress. Indeed, the inquiry which one must put in such a matter is not, after all, whether the administration was good or bad, but whether it was as good as it could be under the circumstances, whether other officers, for example, could probably have managed better. Put in this way the answer must again be, on the whole, in favor of the government.

It must be remembered, however, that the favorable answer to the question propounded above by no means carries with it any implication concerning the value of government industrial management in ordinary times of peace. The industrial activities of the government in war differ from the country's industrial activities in times of peace in several important respects. The scope of industrial activity of the government in war is more limited and capable of more definite control. The government has certain war munitions to provide. Their character and amount are known, and the industrial energies necessary to secure them can be definitely

directed to that end, without embarrassment from competition to divert the country's industrial activities to other ends. It is one thing to make a success of any business under such circumstances and quite another to make a success of it, however success be defined, under ordinary circumstances. For the government in the one case is virtually in the position to determine its own conditions of production and to exclude all competitors from the field. Moreover, it must be remembered that the government succeeded in some matters, notably in the case of the railroad management, only by resorting itself to practices which it had forbidden to the railroads under ordinary management, and also at a financial expenditure that had no relation and no reference to the earning capacity of the railroads.

In short, even if we were justified in pronouncing a wholly favorable judgment on the industrial activities of the government in its conduct of the war, it is doubtful, in the editor's opinion, whether we would get much help in determining the wisdom of extending the scope of government operation in the economic field in ordinary times. To put the matter in another way, it may fairly be doubted, at least, whether war socialism, as it has sometimes been called, has any lessons favorable to peace time socialism, however that term may be defined. The limitation of the province of government is an age old subject of debate. It would be difficult to show that there has ever been in any age or country a large public opinion or, indeed, an important school of thought, which would have eliminated the government from all relation to the private industrial life of its citizens. Indeed, one may say, I think truthfully, that those critics of what they please to call a *laissez faire* policy, who interpret that phrase to suit their arguments as meaning that the government should have no relation to and indulge in no interference with industrial life at all, are quite mistaken in the meaning which they give the phrase. No school of thought has ever advocated such a view. Rather the right and desirability of government interference have always been admitted, but its extent has

been a subject of debate. Under some conditions of national life a larger interference is both desirable and necessary than under other conditions. Since the conditions of national life differ in different generations and centuries, we find the emphasis placed at one time, on the importance of widening the scope of government economic activity, and at other times on the importance of limiting this scope. The world at present seems to be, on the whole, pretty generally of the opinion that the complex conditions of modern civilization require a larger interference by government, in the sense, at least, of stricter regulation of the conditions under which private economic activities are carried on. Many are of the opinion that the scope of directing the conduct of industrial life by the government should be enlarged. It is the editor's opinion that there appears to be little in the government's conduct of the war on the industrial side to lay a foundation for justifying the latter contention.

DAVID KINLEY,
Editor.

UNIVERSITY OF ILLINOIS,
June 10, 1920.

Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

CONTENTS

CHAPTER	PAGE
I Introduction	3
II Efficiency in Government Operated Industries .	10
III Organizing a Nation for War	17
IV Railways in Great Britain	34
V Railways in the United States	43
VI Public Utilities in the United States	61
VII Shipping	70
VIII Labor	82
IX Capital	91
X Food	94
XI Fuel	104
XII Some Unforeseen Results	116
XIII The Popular Verdict and the Truth	121
XIV Inevitable Extension of Government Control ...	125
XV Conflict Between the Executive and the Legisla- tive Branches of Government	128
Bibliography	135
Index	137

**GOVERNMENT CONTROL AND
OPERATION OF INDUSTRY**

PRELIMINARY ECONOMIC STUDIES OF THE WAR

EDITED BY DAVID KINLEY

*President of the University of Illinois
Member of Committee of Research of the Endowment*

1. EARLY ECONOMIC EFFECTS OF THE WAR UPON CANADA. By Adam Shortt, formerly Commissioner of the Canadian Civil Service, now Chairman, Board of Historical Publications, Canada.
2. EARLY EFFECTS OF THE EUROPEAN WAR UPON THE FINANCE, COMMERCE AND INDUSTRY OF CHILE. By L. S. Rowe, Professor of Political Science, University of Pennsylvania.
3. WAR ADMINISTRATION OF THE RAILWAYS IN THE UNITED STATES AND GREAT BRITAIN. By Frank H. Dixon, Professor of Economics, Dartmouth College, and Julius H. Parmelee, Statistician, Bureau of Railway Economics.
4. ECONOMIC EFFECTS OF THE WAR UPON WOMEN AND CHILDREN IN GREAT BRITAIN. By Irene Osgood Andrews, Assistant Secretary of the American Association for Labor Legislation.
5. DIRECT COSTS OF THE PRESENT WAR. By Ernest L. Bogart, Professor of Economics, University of Illinois.
6. EFFECTS OF THE WAR UPON INSURANCE WITH SPECIAL REFERENCE TO THE SUBSTITUTION OF INSURANCE FOR PENSIONS. By William F. Gephart, Professor of Economics, Washington University, St. Louis.
7. THE FINANCIAL HISTORY OF GREAT BRITAIN, 1914-1918. By Frank L. McVey, President, University of Kentucky.
8. BRITISH WAR ADMINISTRATION. By John A. Fairlie, Professor of Political Science, University of Illinois.
9. INFLUENCE OF THE GREAT WAR UPON SHIPPING. By J. Russell Smith, Professor of Industry, University of Pennsylvania.
10. WAR THRIFT. By Thomas Nixon Carver, Professor of Political Economy, Harvard University.
11. EFFECTS OF THE GREAT WAR UPON AGRICULTURE IN THE UNITED STATES AND GREAT BRITAIN. By Benjamin H. Hibbard, Professor of Agricultural Economics, University of Wisconsin.
12. DISABLED SOLDIERS AND SAILORS—PENSIONS AND TRAINING. By Edward T. Devine, Professor of Social Economy, Columbia University.
13. GOVERNMENT CONTROL OF THE LIQUOR BUSINESS IN GREAT BRITAIN AND THE UNITED STATES. By Thomas Nixon Carver, Professor of Political Economy, Harvard University.
14. BRITISH LABOR CONDITIONS AND LEGISLATION DURING THE WAR. By Matthew B. Hammond, Professor of Economics, Ohio State University.
15. EFFECTS OF THE WAR UPON MONEY, CREDIT AND BANKING IN FRANCE AND THE UNITED STATES. By B. M. Anderson, Jr., Ph.D.
16. NEGRO MIGRATION DURING THE WAR. By Emmett J. Scott, Secretary-Treasurer, Howard University, Washington, D. C.
17. EARLY EFFECTS OF THE WAR UPON THE FINANCE, COMMERCE AND INDUSTRY OF PERU. By L. S. Rowe, Professor of Political Science, University of Pennsylvania.
18. GOVERNMENT CONTROL AND OPERATION OF INDUSTRY IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR. By Charles Whiting Baker, C.E., Consulting Engineer.
19. PRICES AND PRICE CONTROL IN GREAT BRITAIN AND THE UNITED STATES DURING THE WORLD WAR. By Simon Litman, Professor of Economics, University of Illinois.
- *20. COOPERATIVE MOVEMENT IN RUSSIA. By E. M. Kayden.
- *21. THE GERMANS IN SOUTH AMERICA: A CONTRIBUTION TO THE ECONOMIC HISTORY OF THE WORLD WAR. By C. H. Haring, Associate Professor of History, Yale University.
- *22. EFFECTS OF THE WAR ON PAUPERISM, CRIME AND PROGRAMS OF SOCIAL WELFARE. By Edith Abbott, Lecturer in Sociology, University of Chicago.
- *23. (Omitted.)
24. DIRECT AND INDIRECT COSTS OF THE GREAT WORLD WAR. By Ernest L. Bogart, Professor of Economics, University of Illinois. (Revised edition of Study No. 5.)
25. GOVERNMENT WAR CONTRACTS. By John F. Crowell, Ph.D., LL.D.

THE CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE
2 JACKSON PLACE, WASHINGTON, D. C.

*These numbers have not yet been published.

CHAPTER I

Introduction

For more than a generation there has been going on in the two great industrial countries, Great Britain and the United States, a sharp conflict between those on the one hand who believe that there should be no government interference with private industry, and those on the other hand who advocate either government control or government ownership and operation, first, of public utilities, and second, of other processes of production, whenever and wherever the normal processes of competition fail to protect the public.

It is well known that during the last forty years a complete revolution has occurred, not only in economic thought but in public policy, both in Great Britain and the United States. Doctrines that were deemed ultra-radical thirty years ago and which a professor of economics expounded only at the risk of losing his position and being branded a socialist—a term which at that day was regarded by probably nine-tenths of average newspaper reading Americans as synonymous with anarchist—these doctrines are accepted today without question by railway presidents, financiers and captains of industry.

The change in popular sentiment has in fact far outrun the change in governmental practice. There has been a very great extension of government control and regulation, not only in the field of public utilities, but in a great number of matters where public health or safety, or the welfare of wage workers is concerned. As examples may be cited the workmen's compensation laws, which place the burden of industrial accidents on the industry and not on the injured employee; the extension of building regulations, factory laws, inspection of food products, restrictions on the employment of women and children. All these laws, which were originally enacted in the face of great opposition, are now accepted by

all concerned as a necessary part of modern industrial life. This great extension of governmental functions, however, has not satisfied the public. There is probably as widespread favor today for government ownership and operation of public utilities as there was a generation ago for government control.

The business men who a generation ago were opposed to public control, and who now accept it as "a necessary evil," are today as strongly opposed to public ownership and operation of industries. It is curious indeed to note the contrasting points of view.

One may talk with the responsible officers of public utility corporations which have been under public regulation, and hear almost invariably the story of the defects of public control as it is actually carried out. He will learn that the average "regulator" is a politician, to whom the small salary which the office pays is a consideration of importance. He will be told that these "regulators" generally lack all technical knowledge of the industries over which they are placed in authority, and are always inclined to give the public the benefit of the doubt, rather than administer even-handed justice between the corporations and those whom they serve.

But when one talks to the average citizen, he discovers a belief, in many parts of the country, at least, that the regulating commissions have protected the corporations rather than the public and that we must look forward to a great extension of government ownership and operation as the only satisfactory solution of the problem.

Into this conflicting arena the great event of the war has projected itself. While it has to a certain extent diverted attention from the problems of economics and government, it has been on the other hand a great experimental demonstration of the results of an enormous extension of the field of governmental activity.

The "man in the street," as the English say, has learned from his daily newspaper how the governments of Great Britain and of the United States have undertaken enterprises

under the stress of war conditions which only the ultra-radical has hitherto dared to advocate. Fixing the prices at which food and fuel and steel and copper shall be sold; controlling buying and selling and transport in international trade; operating the entire railway systems of the United States and Great Britain; building and operating ships on a scale that makes the operations of the greatest private shipping company seem trifling—these are typical of the greatly enlarged range of government activities as a result of the war.

These facts have had and are bound to have in the future a profound effect on the minds of men the world around. Whatever the verdict of the scientific economist or the business man may be on the results of government operation and control of industry during the war, the effect on the popular mind has already been registered. For a generation to come, at least, in every appeal for direct government action to fix the price of commodities and prevent extortion and profiteering, the precedent will always be cited as to what Great Britain and the United States did in fixing prices in the world war of 1914-1919. Arguments based on that precedent are not likely to be upset in the mind of the average voter by any later showing as to the specific results of this exercise of the government's strong arm.

It may be accepted without question, therefore, that in the popular mind government operation and control of industry in the past four years has not merely driven the last nail into the coffin containing the defunct *laissez faire* theory of government; it has dumped that coffin without benefit of clergy into the grave already dug to receive it and has heaped high the earth over it.

But if one would hear opinions diametrically opposed to those just set forth, he need only interview some of the experienced business men who have had occasion to come closely in contact with government operations in some sphere of industrial work during the war. He will hear detailed recitals of concrete examples of ignorance, inefficiency and incompetence on the part of responsible government officers

which to the reciter of the incident are proof conclusive that government operation of industries—or government control, for that matter, to any greater extent than circumstances compel—would be a most deplorable result.

The manufacturer or merchant or railway officer who relates this experience and renders this opinion is as honest and sincere in his verdict as is "the man in the street" who has based his verdict on his general information. Further than this, it is noteworthy that the one has little or no respect for the opinion of the other. The captain of industry believes the opinions of the man in the street to be based on too superficial knowledge to be worthy of attention. The man in the street believes the captain of industry opposes government ownership because he wants to retain industry under private control for his own profit. And, as Mr. Dooley says, "there you are."

In the face of these diametrically opposed opinions, it is worth while surely to undertake an impartial investigation, to find if possible where the truth lies. What have been the results of the wide extension of government control and operation of industry during the war in the two great English speaking countries? Attention may well be confined to these two nations because they are the two great industrial nations of the world which have been developed almost entirely on the basis of private enterprise. Here, in these two nations, in the years before us, will be settled the question whether industry is to be carried on as a private business or a public business.

At the outset it is well to explain some of the difficulties in the way of solving the problem before us. It is easy enough for "the man in the street" to conclude from his desultory newspaper skimming that these governments have greatly extended their control of commerce and industry; but to give a categorical appraisal of the governmental activities in this field is far from an easy task. Official government reports are often delayed years in publication even in peace times. In the exigencies of war, the responsible government officers have been too busy trying to keep up with the manifold

demands of daily work to write detailed reports. Again a good share of these government activities in the control and operation of industry was withheld from publication for military reasons. The importance to the enemy of knowing the economic condition of his opponent, the extent to which government interference is necessary, and the causes operating to bring it about may be as important as knowledge of an army's strength and its location.

But to answer the question "how has government operation worked?" it is not enough to know that the government carried on, or controlled, a certain industry. It must be known to what extent the results are good or bad. It would doubtless be possible for a competent investigator, empowered with the necessary authority, to take a single specific enterprise which has been placed under government control or operation, and by spending weeks or months in examination of its books, records, operations and product in comparison with such records as were available of the same industry's operation under private management, a judicial verdict might be reached as to where and how far the change to government operation had been an advantage or a detriment.

If a similar investigation were made of all industries wherein government control or operation had been made effective in the two countries during the war, a foundation would be thus laid for a complete estimate of the results of government control.

It is needless to say that such an investigation would be an impossibility. Even if the government were to finance the enterprise with unlimited funds, and draft an army of trained economists to conduct the work, there would be no means of reducing to mathematical terms the precise results attained in each specific industry. Without that, the averaging necessary to obtain the final result would be a matter of balance of mental impressions, rather than of arithmetic. Again, both here and in making the original ratings, the personal equations of the experts would have a determining effect on the final result.

Of course no government would finance, or even permit, such an impartial investigation of the results of its work. In time of war, the government will permit no facts to become public regarding any defects or failures in its operations that it can prevent.

At the very time these lines are written, the administration is engaged in a severe struggle with Congress over the question whether the government operations in connection with the war are being carried on efficiently. The absolute necessity of maintaining the popular support of the government while the war continues is so generally recognized that a large proportion of the public condemns any publication in time of war regarding inefficiency in the government work, or even statements concerning it in Congress.

Obviously, then, one need not expect to find, either in the official reports or in the public prints, any adequate statement as to the ways in which government administration has fallen short. Such information must be sought from the isolated statements and items which reach the public prints, supplemented by information gathered at first hand, and great caution must always be exercised not to accept such items of information at their face value until checked and found reliable by other methods.

The above briefly reviews some of the underlying reasons why it is impossible to present any exhaustive and complete review of the entire field of governmental activity in connection with industry since the war began. What the author has attempted to do in the following pages is to set forth such broad, general facts with regard to the problem as he has been able to obtain.

It is, after all, on such general facts that useful conclusions may be safely based, rather than on a multitude of details which, even though collected with impartial effort, often tend to confuse the mind and hinder, rather than help, clear thinking and sound conclusions.

It seems necessary also, in the introduction, to say a personal word. The author undertakes this study entirely

free from bias for or against the policy of public ownership and operation of industry. As an engineer, and as the editor-in-chief for more than a quarter of a century of the leading engineering journal of the United States, with a wide acquaintance among engineers, both those engaged in work for corporations and those in public service, the writer has had unusual opportunities to become familiar with underlying facts regarding both fields of work.

The writer approaches the problem, moreover, with full recognition that revolutionary changes are impending and are indeed greatly needed in our industrial system. He recognizes, on the other hand, that these changes, if they are to result in achieving the greatest good to the greatest number, must have a sound economic basis and be made with due regard to existing conditions and prejudices. A reform may be entirely sound in theory and may conform to the principles of justice, and yet prove disastrous in operation, if the public is not sufficiently informed concerning it to accept it in good faith.

CHAPTER II

Efficiency in Government Operated Industries

In the examination of the question to what extent government operation and control of industry has been a success, it will be necessary again and again to inquire to what extent the operation was efficient. It is well to set down in advance, therefore, the reason why efficiency in the conduct of industry is important and also the essential conditions upon which efficient operation depends.

There appears to be a widespread belief that when an industry is carried on by the government, efficiency in its operation is of no great importance. The groundwork for this belief has been laid by the wide commercial exploiting of so-called efficiency systems that aim solely to secure a large output from the wage worker per dollar paid to him. For example, when a man is told that municipal operation of a street railway is less efficient than operation by a private company, he construes it to mean merely that the private company showed greater net earnings because it made its men work longer hours for lower wages.

If efficiency meant no more than this—a mere question of how the earnings of an industry are to be divided between the capitalists who own it and the workers who operate it—then efficiency would not be of such vital concern to the public. But the events of the war have demonstrated that efficiency is a far broader and more important essential to national welfare than has ever been realized. Indeed it early became evident that victory in this great world struggle would be greatly influenced, if not determined, by the degree to which either of the two great contending groups of nations excelled the other in efficiency.

In the United States, waste and extravagance have long been prevalent national sins. In Great Britain, the blunder-

ing governmental methods commonly employed are well expressed in the current expression "muddling through." In both nations this vice of inefficiency in government matters has been lightly passed over in peace times because it *apparently* meant nothing more than the loss or inconvenience of a few individuals and a heavier burden laid on the taxpayers.

NATIONAL SECURITY DEPENDS ON EFFICIENCY

The war has aroused us to a realization that inefficiency in governmental methods can bring about defeat in battle and a nation's downfall. To give a concrete illustration, had Great Britain not succeeded in organizing its manufacturing industries for munition production with an efficiency never before approached in operations on such a huge scale, the war would have been lost before the United States was prepared to exert its strength.

There is hardly a more important economic lesson that the war has taught than the vital importance of efficiency in all the processes of production. And this is true in peace as well as in war. The feeding and clothing and sheltering of the world's teeming millions require the operation of industries on a vast scale.

If all these processes of production, transportation, manufacturing and distribution are carried on efficiently, with all the utilization of power driven, labor saving machinery that the progress of science and the arts has placed at the service of mankind, then a limit can hardly be set to the degree of comfort which the masses of mankind may attain. If, on the other hand, inefficiency prevails, then the world's production will soon fall below the line necessary to supply the necessities of life, to say nothing of its comfort.

It seems important to emphasize this matter at this particular time, when the doctrines of the Bolsheviki have inundated the most populous nation of the world and threaten to spread elsewhere. Whatever beliefs may be held concerning the distribution of the products of industry, it is too evident to require argument that there must first of all

be products to distribute, or rich and poor will go down to destruction together. The greater the efficiency of a community or a nation, the greater will be its volume of production available for the benefit of all.

It is generally agreed that the war will bring about profound changes in our social and industrial organization. Whether these changes will be for the better or the worse will depend very largely on how they affect the productive efficiency of society as a whole. This, then, is the reason why the most important question of all respecting the government's action, in controlling industry during the war, is what effect did it have on efficiency?

THREE CONDITIONS OF EFFICIENCY

And now it is useful to go one step further in our analysis. In order that an industry shall be operated efficiently, it is necessary that there shall be efficiency in three places. First, there must be efficient ~~labor~~—the rank and file of the workers must carry out their set tasks diligently and faithfully. Second, there must be an efficient organization—the system on which the whole body of workers, from highest to lowest, is organized must be such as to make efficiency at least possible. Last, and most important, those who guide and direct the organization must be competent for their tasks.

It is on this last element, more than any other, that the efficiency of the whole organization depends. The workers may be ever so diligent and faithful and the plan of organization may be faultless, and still the enterprise may suffer shipwreck because the men at the head are lacking in good judgment or in knowledge of their business.

All this is, of course, elementary to experienced business men. It is well known that the success of an enterprise depends on the quality of the men who run it,—that one man at the head will make a business yield large profits where another, apparently not much inferior in qualifications, will steer a straight course to bankruptcy.

These three essentials of efficiency apply exactly the same

when an industry is carried on by the government as when it is carried on by private enterprise. If a city is operating an electric lighting plant, for example, in order to get efficient results, it must have an efficient labor force, an efficient plan of organization and competent men to direct the work. The question whether it will secure higher efficiency or lower than a private company in the same field will attain depends on the degree on which the city owned plant excels or falls below the privately owned plant in each of these three particulars.

THE STANDARD FOR MEASURING GOVERNMENTAL EFFICIENCY

There is another matter which needs to be clearly understood in order to form a just opinion as to the results of government industrial activity during the war. When we examine the operations of a government industry and desire to judge its efficiency, the question at once arises, by what standards shall we judge it? If we attempt to mark it on a 100 per cent scale, so to speak, then we shall inevitably reach an erroneous conclusion. There is no such thing as 100 per cent efficiency in any art or industry, whether carried on by a private firm or by the government. Furthermore, the larger an organization becomes, the greater is the difficulty in securing a high degree of efficiency. There is a widespread fallacy to the effect that production on the largest scale is the cheapest production. That fallacy is based on superficial and limited knowledge. Those most familiar with the inside of the great industrial combinations know how often the advantages which they possess by reason of their size are overbalanced by serious disadvantages.

This is a field, moreover, in which there is no rule to fit all industries. The size of the economical operating unit varies greatly. In agriculture in the temperate zone, for example, the farm large enough to be worked by a single family has developed by survival of the fittest, the world over, as the size of the economical operating unit. In raising sugar cane, in Cuba, great plantations with hundreds of diligent workers are essential. In manufacturing industry, while production

on a large scale is generally essential to economy, the experience of the past twenty years has demonstrated in many cases that the production costs of some of the so-called trusts are materially larger than those of some of the concerns of moderate size.

A mistake very commonly made by critics of government administration is to compare government methods and results with those obtainable in some small private business. It is said, for example, that the government worker does not have the incentive to energy and industry and initiative that the man does who is working for himself. Of course, this is true; but exactly the same thing is true of the individual employe and to a large extent of the officers as well of a great public utility or manufacturing corporation.

Again, it is common to hear criticism of government administration of business because of the "red tape" involved. It is overlooked that a large part of the so-called "red tape" in connection with government business merely represents the system which must be established in connection with every large scale business to avoid waste and loss.

This "overhead expense" of carrying on business increases generally with the size of the business. To take a familiar illustration, compare the elaborate system and organization of a great department store, with its army of specialized employes, and the simple methods in use in a small retail store, where the proprietor and a half dozen assistants constitute the entire force.

The same illustration will serve to present what is perhaps the greatest difficulty to the maintenance of efficiency in any great business. The proprietor of a small retail store is in intimate personal contact with every one of his assistants. He himself must be efficient in the conduct of his business or he will be left behind in the race of competition. He can maintain efficiency in each of his assistants because he is on the spot to see and know. But in the great department store, or in any great business employing hundreds or thousands of workers, the individual employe's defects as well as his

merits are often overlooked. Other economic conditions may drive out the small competitor; but in estimating the success of government organization in carrying on any work, the question must always be, not as to whether defects exist, but whether the results attained were on the whole as good as a private business concern would have attained *on work of similar magnitude*.

NEW ACHIEVEMENTS IN EFFICIENCY RESULTING FROM THE WAR

The economic lessons taught by the war ought to lead to a study of national efficiency from a broader standpoint. The world has been amazed at the enormous rate of production which the war has shown to be possible through the combination of modern machinery, trained labor, free from artificial restrictions upon its output, skilled technical direction and ample supplies of capital and of raw materials. In many respects this war production has been carried on with an efficiency never before known. It is unthinkable that this efficiency once attained should be sacrificed for a return to the methods of the past. For one thing, the coming world-wide competition in international trade will put out of business any industrial nation which fails to put in practice the principles of efficiency which the war has taught.

It may be thought, however, that this is a view of the problem from the capitalistic standpoint, and that in order to square with the theories of the socialist and the labor leader, there must be a return to such labor restrictions as prevailed in England before the war.

If we are indeed to return to the prewar conditions in other respects, there is much to be said in defense of the labor union standpoint. Suppose, however, that artificial restrictions on the distribution and sale of the output were likewise swept away. Suppose we think of the world as a family of workers. Under these conditions, the greater the production of raw materials and manufactured products, the greater will be the product of goods for everyone to use and enjoy. Under

these conditions, the greater the use of labor saving machinery, the more efficient the utilization of material, the more diligent the workers at their task, the greater will be the amount finally produced to divide among all for their use and enjoyment.

This ideal we must approximate so far as possible. The nearer we can approach it, the nearer will we attain national prosperity and the welfare of the individuals that make up the nation.

WHY IT IS NECESSARY TO WATCH EFFICIENCY

It is not often realized why efficient organization is a vastly more important matter today than it was a few years ago. It is because under a competitive order of business, efficiency is automatically provided for. The least efficient organizations fail and disappear while the most efficient succeed and grow. But under modern large scale production, competition no longer has free play. Further, the larger an organization grows, the more difficult is it to conduct it efficiently. Inefficiency in the conduct of private monopolies or in their control by the public authorities or industries carried on by the government directly is always paid for by the public at large in the form of high prices or poor services, and there is no automatic stimulation of efficiency, such as exists where industries are carried on on a freely competitive basis.

CHAPTER III

Organizing a Nation for War

When the world war began in 1914, the two great Anglo-Saxon nations were not only unprepared in a military sense; they were wholly unprepared industrially, and they were wholly ignorant of this latter unpreparedness. No one dreamed that the coming struggle was to be a conflict between the farms and workshops and mines and mills of the nations quite as much as between the armies in the field. The popular slogan among the British business men when the war cloud broke was, "business as usual." "Let our brave British soldiers and sailors fight the battles and we will go steadily on buying and selling, mining and manufacturing just as if there were no such thing as war." It was not an unpatriotic sentiment by any means. The underlying thought was that Britain's trade and industry, on which her prosperity depended, must be maintained to support the armies in the field. There was no conception of the extent to which the war would affect the life and the daily tasks of every individual, from the captains of industry to the poorest laborer.

We know now that the world war was a struggle between the industrial forces of the nations engaged quite as much as between their armies in the field and their navies on the seas. We know now that organization for that definite end was just as essential for the industrial forces of the nation as drill and discipline for the military forces; but none but the Germans knew this when the tempest broke in 1914.

It is common

THE NECESSITY OF ORGANIZATION

A hundred thousand individuals may collect in a crowd; but without organization they are powerless for attack or defense, and will perish in a few days for lack of subsistence

except as organization is effected to supply their needs. The hundred thousand may even be organized in detached groups formed for different purposes, but until the groups are brought together and organized for a common purpose, they are incapable of effective effort.

The great task which confronted Great Britain and the United States when each entered the war, therefore, was the task of organization. How to convert the entire man power and machine power and money power of these great nations from operation in detached units for peace purposes to operation as a united and harmonious whole for the one great aim of winning the war, was the problem to be solved.

It was only very gradually that this great controlling fact came to be recognized. It was only piecemeal and by painful process of trial and error in many cases that the reorganization was effected. If the government at the outbreak of the war, in either Great Britain or the United States, had immediately undertaken the wholesale interference with every individual and every business which in the end became necessary, a storm of public protest would have gone up that would have made success impossible.

GOVERNMENT ORGANIZATION DEFECTIVE

In both Great Britain and the United States private industry had attained a high degree of efficiency prior to the war, but government activities were on the whole poorly conducted. The inefficiency of government work was due, not so much to the rank and file of government workers, as to defective organization, lack of intelligent planning and direction, and long delays in action on the part of higher officials.

Hon. Franklin K. Lane, on retiring after seven years' service as Secretary of the Interior, gave the following keen analysis of the federal government as a business organization:

Washington is a combination of political caucus, drawing room and civil service bureaus. It contains statesmen who are politicians and politicians who are not statesmen. It is rich in brains and character. It is honest beyond any commercial standard; it wishes to do everything that will promote the public good; but it is poorly organized for its task. Fewer men of larger capacity would do

the task better. Trust, confidence, enthusiasm—these simple virtues of all great business are the ones most lacking in government organization. We have so many checks and brakes upon our work that our progress does not keep pace with the nation's requirements. There are too few in the government whose business it is to plan. Every man is held to details—to the narrower view. We need for the day that is here and upon us men who have little to do but study the problems of the time and test their capacity at meeting them. In a word, we need more opportunity for planning, engineering, statesmanship above, and more fixed authority and responsibility below.

How could a government, which in the ordinary routine of peace is unable to efficiently plan and organize its own activities, undertake to efficiently organize and exercise absolute control over the productive activities of the nation? To state such a proposition was almost to condemn it. *

It would have seemed an entirely safe prediction at the outbreak of the war that government interference with industry, where industry was essential to win the war, would be the best means of ensuring defeat. And yet in both nations, as one step after another was taken in government control, the necessity was so obvious that the industries affected acquiesced with hardly a word of protest.

*not really d
it only c the
way - Jero
res*

The most marvellous accomplishment of the great struggle was the successful organization of both these great nations into a vast machine, all of whose operations were shaped toward the one end of winning the war.

Of course this huge machine did not operate with 100 per cent efficiency. No machine and no organization which fallible human beings originate and direct ever operates with anywhere near perfection. The story of the war organization in these countries and in every country is full of records of failure and incompetence, gross error and scandalous waste. But when the great organization is viewed as a whole and measured by the results attained, it is recognized that the failures and mistakes bulk small in comparison with the general success.

TIME NECESSARY FOR EFFICIENT ORGANIZATION

In the ordinary operations of commerce and industry, the building up of an organization has been generally recognized

to be a task for which a long time is essential. Mr. Carnegie, at the height of his business success, declared that the premier position of his companies was due neither to their control of raw materials nor to their superb mills and furnaces, but to the organized group of men which directed these activities. But the building up of this efficient organization had occupied the best part of his life. So it is with every enterprise which has attained a high degree of efficiency. It has been gradually built up, usually from small beginnings, and by a process of trial and error and gradual growth has advanced its position.

But when the demand came that the nations should reorganize for war, time was the element most lacking. It was evident not only that the victory would fall to whichever side was able to achieve greatest efficiency in organizing its people for war; but to whichever side was first able to get this organization into operation.

In the ordinary operations of peace times, efficiency is commonly measured in money. The most efficient steel making plant in peace times is the one which can turn out its products at the lowest cost. The most efficient in war times is the one which can fill an urgently needed order most quickly.

How could a government with all its machinery adjusted to peace time operation at a phenomenally slow speed accomplish the task of reorganizing all the activities of an entire people to the highest rate of speed possible? The task seemed impossible. It would have been impossible save that its successful accomplishment was absolutely essential to national existence. Had the task been presented as a whole at the outset of the war, as we can see it now, its very magnitude would have appalled those on whom the burden was laid. But taken as it was, one task after another, as one urgent need after another became plain, the great accomplishment became possible. Where one man failed another took up his task; where one means was found insufficient a substitute was rushed forward and made to serve.

A military campaign can not be carried out on a hard and fast plan made long in advance. Its plan must be subject to change from day to day and from hour to hour, as the movements of the army or other changes in conditions make necessary. So the government organization of industry had to be subject to continual change as different needs became urgent.

continue to adapt

For example, in the early part of the war Great Britain turned as much as possible of her shipbuilding facilities toward production for the navy in order to make as near certain as possible her control of the seas. Later, when the destruction of merchant vessels by enemy submarines endangered the Allied food supply, the shipyards were turned back to merchant work.

PARTY POLICIES OPPOSED TO GOVERNMENT INTERFERENCE

At the outbreak of the war, governmental policy in both Great Britain and the United States, so far as it was formulated in party policies, was strongly adverse to government interference with private industry. Historically, the Democratic party in the United States was the party least in favor of the exertion of federal authority. In Great Britain, the Liberal party is historically the defender of the *laissez faire* theory of government. The dominant political issues of the past quarter century have placed these older ideals in the background, but they still have influence with great masses of people.

Liberal -
war on
ground

The governments of both nations were unprepared with any principles or policy for dealing with the war emergency. So far as any principles or policy had sway, they were contrary to the course which the stern logic of necessity gradually compelled both nations to adopt.

When Great Britain entered the war, it was at first assumed that the great government owned and operated munition factories, added to the great private works in Great Britain which had specialized in war material, would be able to supply the needs of her armies.

belief in
ability of

It was promptly found that these would be wholly inadequate. Great Britain not only had to equip her own new armies but supply to a large extent the armies of her allies. There was no time to enlarge the government factories or to build up new organizations to carry on government work. The thing to do was to get munitions from every source possible. Every factory in Great Britain capable of making guns or shells was at once appealed to to undertake such work and the government extended whatever help was needed. This was not done on any system. There was no time to formulate a system. What was done was to give whatever aid was needed to enable the factory to equip itself for the work. In some cases loans were made, with or without interest. In other cases the government paid for the new plant, either directly or indirectly through an allowance on the price of the output which it purchased.

There was in those early months of the war no conception of the length and magnitude of the struggle ahead, and little attention was given to the prices paid. The idea that it would be as necessary to husband the financial strength of the nation as its industrial strength came later. There was no time to haggle over prices or to advertise for bids in the usual manner on government work in peace times.

The government did not embark on this work with any idea of controlling the industry with which it dealt. It took the shortest and most direct means of supplying its urgent necessities. It had the power, indeed, to have commandeered the plants to which it let contracts; but such a course would have defeated the end in view. The organization which the manufacturer had built up was in most cases as important as the plant. To set this organization into operation on government work was the thing desired.

BREAKDOWN OF THE COMPETITIVE SYSTEM

The very magnitude of these operations very rapidly made necessary an elaborate system of government control.

It was the magnitude of these operations that soon brought

into bold relief the inadequacy of the competitive system, or the law of supply and demand, to meet the nation's necessities. There was no limit to the demand for munitions. The supply had to be created from sources that did not exist. To proportion the price to the urgent necessity of the purchaser was manifestly unjust.

This is indeed typical of the situation that has existed in hundreds and thousands of industries. The world has been accustomed for generations to conditions under which the supply of commodities is somewhat in excess of the demand, or can be increased to meet the demand as a result of the stimulus due to a slight rise in price.

The world war has created a demand far beyond the supply. There was not enough labor, there was not enough steel, not enough food, or coal, or ships, or wool or leather. More than this, *raising the price would not materially affect the supply available for immediate needs.*

HOW RATIONING BECAME NECESSARY

These things were developed as the result of practical experience in the British Government's dealings with the munitions making industries. The government had contracts with thousands of manufacturers to produce shells in enormous quantities to feed its artillery. All these makers had to be supplied with steel, and this at a time when steel was urgently demanded for warships and merchant ships at home, for export to munition works in France and Italy; for a multitude of other war manufactures. Had supply and demand been left free to take their course, the prices of steel would have gone on rising until some purchasers would have been forced out of the market. Those industries alone would have secured steel which were able to pay the highest price for it; and they would have bought a surplus in order to be sure of keeping their plants in operation.

This would have resulted automatically in concentrating the profits of the steel using industry in the hands of the makers of steel.

But such an operation would have been most detrimental to the nation's welfare. The thing to be desired was that everyone who needed steel for war uses should secure a proper supply and be assured of such a supply without the necessity of hoarding. It was also extremely desirable that profits should be equitably distributed all along the line, and not concentrated in any one holding. The steel maker should have enough profit to induce him to push his production by every possible means, but so should the coal operator who furnished him with coal, and the mine operator who produced the ore; so should the manufacturers who made the steel into shells and tanks and ships; and the workmen employed by all these concerns must have wages sufficient to satisfy them and prevent strikes.

Never was there better illustration of President Cleveland's famous remark that "it is a condition and not a theory that confronts us." The theory of the law of supply and demand and its relation to price was unaltered; but a condition had arisen that made the rise of prices in accordance with this law and the distribution of products according to price operate against the public interest, instead of for it.

PRICE FIXING BECOMES NECESSARY

The government of Great Britain was forced to fix prices for steel to meet this condition, although it did not do this until the war had been going on nearly a year and a half. Nor was this enough. The government was obliged to step in and direct how steel should be distributed. It could not permit steel which was urgently needed for munitions to be exported, even though the purchaser in a neutral country might offer a tempting price to the steel maker. It could not allow steel to be rolled into building material when it was more needed for ships. Where the supply was insufficient for the demand, it had to decide which of the war industries most urgently needed the metal.

It was obvious that where price fixing by government authority is made effective, some adjudication of priority

rights is essential; otherwise, who shall decide which purchaser shall receive the most of a limited supply? Under normal operation of the law of supply and demand, the man who can afford to pay the highest price is the one who receives the goods. This is supposed to automatically measure his need for them. But if the price is the same for all and there is no means of equitably adjudicating priority rights, then the goods would probably go to the buyer who made the largest present to the seller's sales agent or other responsible official.

CONTROL IN THE LABOR MARKET

The labor situation was the one which soonest made clear the necessity of government control. This again was not foreseen at the outset. It had to be demonstrated by the process of trial and error. Lack of skilled workmen was quickly felt as a limitation on the output of munitions. The various competing manufacturers began bidding against each other for the services of workmen skilled in shell production. This had the effect of increasing the labor turnover and unsettling the rank and file of workers, while it tended to make the small class of specially skilled men hold on to their advantageous position and oppose attempts to impart their skill to others.

The government had to interfere and establish restrictions against the transfer of skilled workers from one district to another. It had to bring back skilled workers who had volunteered for army or naval service. It had to establish a vast system for training labor; and for "dilution" of skilled labor with unskilled labor and with women workers.

It was impossible for the employers of labor to grapple with the labor situation themselves, either individually or in combination. Labor was too distrustful of capital to make this at all possible. The matters at issue were not alone commercial and economic. They were political and social. The whole issue of the war was at stake. Unless the rank and file of British labor could be enlisted to contribute their

✓ summer
of
army
and
naval
labor

best efforts to swell the industrial output of the nation, defeat was certain.

HOW LLOYD GEORGE SAVED THE WORLD

The fate of Great Britain and of the world never hung on a more slender thread than during those months when the question whether British labor would sacrifice its dearly purchased power over wages, hours of labor, working conditions and output was undecided.

It is very doubtful whether any living British statesman save Lloyd George could have accomplished the feat of persuading labor to make the sacrifice. Had he performed no other service than this during the five momentous years of the war, he would deserve perpetual honor as the savior of his country and the world.

GOVERNMENT WELFARE WORK

And having induced the workers of Great Britain to make the sacrifice, it was then the responsibility of the government to see that these workers were properly cared for. The government had to establish tribunals to adjust differences between employers and workmen and avert strikes. It had to suspend the factory laws, which limited the hours of labor and the employment at night work for women and children, and having done this it had to take extensive means to curb abuses, such as working unduly long hours. It had to provide housing for the workers on an enormous scale, it had to provide special transport service to carry workers to and from their tasks. It had to provide for adjustment of wages to meet the rapid increase of living costs. It had to provide for limitation of profits by the firms engaged in filling government contracts. Previous to the war a few individual firms, more progressive than their neighbors, had undertaken for the benefit of their employes various enterprises classed under the general head of welfare work. Under the stress of war conditions, the government had to organize welfare work on an enormous scale for the army of munition workers, to con-

serve their health and productive capacity, to cultivate their spirit of patriotic service, and to keep them contented so as to ward off industrial strife.

A volume might be written on the measures taken by the government for the control of industry in connection with the relations of labor alone. In fact, the government reports, which describe in detail the measures employed in the dealings with labor, comprise many volumes.

What is desired here is to point out how the control of the munitions industry in every particular—capital, profits, labor, skill, materials, and transportation—grew out of the nation's necessities for an enormous supply of munitions, a necessity which could not possibly be met in any other way.

Very few British statesmen or business men believed before the war, or believe now, that the British Government could run a factory for making guns, or projectiles, or explosives, better than, or even as well as it could be run by its private owners. The government control was exercised when experience demonstrated its necessity, and not before.

HOW DID GOVERNMENT CONTROL WORK?

When one asks the question how did government control work, he receives two diametrically opposite answers and, curiously enough, both of them are true. Government control was established by a process of trial and error; and there was a vast amount of error in it. Nobody was wise enough to know exactly what was the best plan of solving each new and unprecedented problem as it arose. Time was generally lacking to permit the investigation and study necessary for deciding on the best course. The government had to build up a great organization to control the munition business at a time when it had to create numerous other organizations to conduct the war activities. Mistakes were inevitable. Waste was inevitable. Confusion was inevitable. There were cases where capital was unjustly treated, there were cases where labor suffered. These things would have happened with any man or set of men in control and under

any form of government or of private enterprise—had it been possible for private enterprise to undertake a task which required the authority and prestige of government for its performance.

So if one views the work done by the government in the control of industry in its details, he will naturally take a pessimistic view. It is only when he views the accomplishment as a whole that he can appraise at its true value the remarkable achievement in organization and control which England and America achieved under the stress of war.

THE NECESSITY OF CENTRAL CONTROL

One of the most difficult of all the problems in connection with the government organization was the problem of concentrating authority. Everyone knows how the success of the Allies' military operations that turned the tide of defeat into a current of victory began with the bestowal of supreme authority on Marshal Foch as commander of all the Allied armies.

In the industrial field, both Great Britain and the United States failed of effective action until, after many months of disastrous delays, an effective central control was finally established.

BUREAU CONTROL *Versus* THE GENERAL STAFF

Even in the military field, the outbreak of the war found the United States with its army organizations handicapped by a fatal lack of central authority. The army was organized in a number of different bureaus, each charged with its own special duties; but all of them overlapping and conflicting more or less with each other and with traditional enmities, personal and otherwise, that continually interfered to prevent cooperation.

In theory, of course, a central authority over the whole existed in the authority of the President as Commander-in-Chief, exercised through the Secretary of War; but no such control could be effective. The need was not a one man

authority, but a central organization to plan for and direct all arms of the service. This need had been long recognized even in peace times, and legislation had been enacted authorizing the creation of a General Staff to exercise this very power. But as long as peace continued, the defenders of the old bureau system, under which each bureau was supreme and could conduct its own affairs as it pleased, were too strong to be overcome. It was not, in fact, until the nation had been for months at war and the conflicts going on between different bureaus became an evident, serious danger to the nation's welfare, that the organization of the General Staff to exercise central control over the entire army was undertaken in an energetic way.

THE COUNCIL OF NATIONAL DEFENSE

It was dimly seen, also, in the months before the United States declared war that the nation had no means of uniting all its forces for action, and a first attempt to supply this lack was made in the creation of the Council of National Defense. This was a body made up of the several Cabinet officers who were heads of departments which were supposed to have something to do with the war, and half a dozen or more men who had been selected almost at random—manufacturers, army officers, college presidents—all patriotic but greatly varying in ability, and the whole organization possessing advisory powers merely, and no real authority. The council did an immense amount of work. There was nobody else to do it; and the temper of the American people was such that advisory power was in many cases as good as legal authority.

But when it came to really important matters, where a central *authority* was most needed, the council was powerless. In those early months of the war, men went to Washington on important missions and came away despairing at the chaos they found. The Council of National Defense had no organization competent to act upon and decide questions. It was swamped with work, so that its members broke down under

the physical strain. When it came to matters where real authority had to be exercised, one had to see a Cabinet officer after all, and the Cabinet officer in many cases said, "Only the President can pass on that."

That was the condition of deadlock that for months paralyzed many efforts to mobilize the nation's industries. Had President Wilson been twenty supermen combined in one, he could not have discharged the multitude of responsibilities which were at the time placed on him alone. What was needed was not a central man, but a central organization, with authority to guide and direct and harmonize all the energies of the nation.

It was at this stage of affairs that a strong movement arose in Congress, in which leading men of Mr. Wilson's own party were prominent, to have a central body created corresponding to the Ministry of Munitions in Great Britain, to exercise a control over the industries of the country. This movement was opposed by the President; but afterward, under the broad authority granted him by the Overman Act to reorganize the war activities of the nation, the War Industries Board was created.

This board became, by a process of natural evolution, the chief authority in coordinating and directing the entire industrial forces of the nation. Besides determining all matters of priority, it had the responsibility of fixing prices of the staple commodities of trade, and it was the central organization which brought together for cooperative action the Federal Trade Commission, which controlled the exports and imports of the nation, the Department of Labor, the Fuel and Food Administration Bureaus, and the foreign representatives purchasing for the supply of the Allies.

It would be difficult to exaggerate the difference between the atmosphere of official Washington in the summers of 1917 and 1918. In the first months after the declaration of war, hundreds of organizations, industrial and governmental, were feverishly at work, each on its own affairs with little or no knowledge of what others were doing; constantly get-

ting in each other's way and undoing what the other had done. Hosts of men were assuming authority they did not possess, and as many more were "passing the buck" to some other fellow. On many war activities, whole months of time were lost through sheer inability to get decisions on important matters.

A year later, Washington was directing the whole nation like a great machine. Calmness and confidence had succeeded the frantic hurry and distrust and bickering of a year before. It is almost impossible to appreciate the hugeness of the task accomplished. A nation of a hundred million people had been coordinated in all its activities and directed toward a single object. From the hour of their rising—an hour earlier than ever before—men worked, ate, drank, bought and sold till their day was ended, and not an hour passed that the course of their actions was not touched at some point by the nation's plans to win the war.

ESTABLISHMENT OF CENTRAL CONTROL IN GREAT BRITAIN

To turn now to an earlier chapter in history, it is to be recorded here that Great Britain went through a similar and even longer period of chaos in her governmental activities before a central control was established.

In fact, Great Britain was not industrially organized to win the war, as has been already indicated, until the Ministry of Munitions was created and Lloyd George was placed at its head on May 25, 1915.

Just prior to this, the situation was described by the *London Times* as follows:

The central difficulty in obtaining a sufficient supply of munitions of war arises from the multiplicity of government departments, all more or less overwhelmed by the emergency, all clogged by official routine, all unused to business methods and ignorant of manufacturing technicalities, all issuing confused and often contradictory orders, all pressing their own requirements without regard to the rest. Manufacturers eager to help fell back baffled by a fog of official confusion; they apply in one quarter and are referred to another; they receive contradictory instructions and not infrequently fail to elicit any reply at all.

The picture is as faithful a one of Washington in 1917 as of London two years earlier.

central control
cause all
abs a
find

Nobody looking back now at the situation doubts that coordination of organization under a central authority in both Great Britain and America was essential to the winning of the war; and yet what a ponderous barking the critics of the daily press and many men in high places set up at this monstrous assumption of authority by the executives of the two nations! How many times were Lloyd George and President Wilson declared to be grasping more autocratic powers than the Kaiser had exercised. How many sage editorials berated Congress and Parliament for abdicating their powers!

ONLY THE EXECUTIVE COULD CREATE EFFICIENCY

Because of this criticism—which those who made it must now read with shame—it is worth while to consider what was done to effect this organization. And the central fact which stands out is that the waging of war can only successfully be done by the executive branch of the government. The legislative and judicial branches have their place, but their place is not in carrying on a war. Congress acted wisely in passing promptly and with little opposition a few statutes placing full authority in the hands of the President or those to whom he should delegate it, and not attempting to insert a multitude of details in the acts.

Of course, as has been already said, the great executive organizations created under this authority made a vast number of mistakes and betrayed a great amount of incompetence and worse; but that would not have been prevented in any way had Congress attempted to interfere with detailed directions, as it is very apt to do in enacting laws.

In Great Britain the volume of war legislation passed by Parliament was much larger than that enacted by Congress, perhaps on the theory that parliamentary action is essential there, the executive being merely the representative of Parliament.

And finally it should be said that the coordination of industry in the United States, and of all the multitudinous war

activities, was only possible because the executive authority was backed by an overwhelming public opinion. The criticisms that the executive was assuming autocratic powers fell on deaf ears. The sound common sense of the people perceived that central leadership and control was absolutely essential. There were few to inquire whether the executive's action had warrant in law. A great chorus of criticism arose when Fuel Administrator Garfield decreed public holidays and suspension of business to save fuel in the cold winter of 1917-18, but the order was obeyed. When gasless Sundays stopped pleasure riding in automobiles in the fall of 1918, a few lone individuals who had the bravado to defy the order found themselves such objects of public contempt that there was no need to appeal to the police to enforce the order.

This was true of government control of industry all along the line. Millions accepted it gladly as a necessary part of winning the war.

It is this fact that particularly needs to be borne in mind whenever the government's action in war is taken as a precedent for its actions in peace. The patriotic devotion of the millions of individual citizens was an enormous factor in the success of government control of industry and all activities during the war. In theory, the citizen ought to be equally devoted to his country's welfare in time of peace; but everyone knows that human nature is not made that way.

CHAPTER IV

Railways in Great Britain

On the day following Great Britain's declaration of war, the entire railway system of the country was taken over by the government. The reasons for this action are as important as the action itself. Government ownership and operation of railways has been more or less actively discussed in England for years and the discussion has turned generally on the relative economic advantages of government and private operation. With the coming of war, economic considerations were put in the background and the railways were taken over by the government as a military necessity. It has long been recognized that in the time of active military operations, railways are as important an element as weapons. This world war has demonstrated that the operation of transportation lines in far distant lands across the seas may have an important influence on an army's campaign.

The necessity for direct government control of railway lines in the event of war had long been foreseen in Great Britain. Legislation providing for such control was enacted in 1871, when the military lessons of the Franco-Prussian war were impressed on the world, and only an official order was required to put it into effect.

On the surface, the change was exceedingly slight at the outset. Every wheel and cog of the vast railway organization continued in motion the same as before; every employe and official, from the navvy delving beside the track to the General Manager in his office, went on with his work as before. The sole difference was that the general managers of the thirteen great systems which constitute the railway net of Great Britain were made a Managing Board for the whole, with the president of the Board of Trade (a govern-

ment official) as the official chairman, and the general manager of one of the companies as the working head.

As is well known, Great Britain, where the railway originated, started out on the theory that the railway business should be a freely competitive business, and has always aimed through governmental action to preserve competition and prevent monopoly. There has been for many years a steady decline in the amount of competition between the different companies. With the taking over of the railways by the government on August 5, 1914, the competition which the government had for so many years labored to preserve was terminated at a stroke. The questions of divisions of traffic between the different companies were at an end. All the railways of the country were to be operated as a single system.

This difference did not at the outset make any apparent great change in the railway operations. The thing of most importance at the start was the organization of the railways to meet the necessary movement of the troops and supplies. With the government in direct control, this was a far simpler matter than would have been the case had the operation by private companies continued.

One matter which was greatly simplified by the change was that all government traffic, whether of freight or of troops, was moved without charge. The saving in delay by reason of no weighing and billing and ticketing being necessary was, under war conditions, a matter of vital importance.

The British railways handled the military traffic during the war with marvellous efficiency. The mobilization of Great Britain's first army of 120,000 men, which was landed in France within a fortnight of the declaration of war, required the movement of 1,500 trains, and 9,000 cars were required to carry the 60,000 horses of the force. Southampton, the point of embarkation, was closed to all but military traffic. On one day, 104 trains carrying 25,000 troops, over 6,000 horses, and 1,000 tons of baggage were scheduled to reach Southampton at 12 minute intervals during the 16 hours from dawn to dark. If any train was as much as 12

minutes late, it had to take a side track and wait until all other trains had passed. During the whole embarkation of the expedition, not a single train failed to keep its place in the procession conveying troops from different points of the country.

Sydney Brooks, writing in the *North American Review* in February, 1918, stated that the British railways had then, since the outbreak of the war, transported for purely military purposes, more than 13,000,000 persons, 2,000,000 horses and mules and some 25,000,000 tons of explosives and war material. Of the depletion of the staff by the war, he states that of 540,000 employes, 170,000 enlisted, whose places were partially filled by 60,000 women.

The basis of the agreement under which the government would take over the railways from their owners had been decided on long before the war. The final terms were settled and announced in September, 1914, within a month after the railways were taken over. Substantially these terms were that the companies owning the railways received a rental equal to their net earnings in the year preceding the war. They were not concerned, therefore, with the manner in which the government conducted the business, the way it distributed traffic among the different lines, or the rates it might charge.

When the railways were first taken over by the government, the necessity chiefly in mind was the military necessity—the operation of troop trains, possible direct control of the lines in case of an invasion, etc. Under the exigencies which the war created, radical measures were taken which would have been scarcely possible had operation by private companies continued. For example, a great mileage of military railways was built in France. Because of a scarcity of rails and rolling stock, many of these French roads were laid with rails taken from British roads.

Again, the British railways had to move an enormous traffic with an operating staff depleted by military recruiting, with deficient rolling stock and a scanty coal supply. Under peace conditions it was exceedingly difficult for a railway

company to secure consent from the Board of Trade for the abandonment of a single railway station. The necessities of war made necessary the abandonment of more than 500 country stations. Entire railway lines in isolated districts were put out of business in order to send the rails to France and other theaters of war. Over 4,000 miles of military railway line were built by British railway men after the war began.

Under peace conditions, also, the service the companies had to render was under rigid rule fixed by Act of Parliament and Board of Trade orders. The necessity of moving freight traffic in time of war made it necessary to cut down passenger traffic by drastic measures, and especially the running of nonessential trains. On the London & Northwestern system alone, 500 passenger trains were canceled and 44 stations were abandoned. Passenger fares were raised 50 per cent and many of the luxuries of travel were restricted, such as seat reservations and the use of sleeping and dining cars.

In the movement of freight, also, drastic measures were put in force to reduce unnecessary traffic movements. Coal shipments were required to be made from the nearest producing mining district to the territory to be supplied, and long distance shipments from a mine to a customer, who should draw his coal supply from mines in his own district, were prohibited. Severe penalties were laid down for delays by shippers in loading and unloading cars.

These are typical of the radical measures which were adopted under government railway operation in Great Britain. They would have been impossible with the railways under private company control. They would have been impossible for even the government in times of peace. In the presence of the war calamity, however, everyone recognized that the radical measures were adopted in the interest of national safety, and there was general acceptance without protest.

More important than all the other reasons for government control, however, was the railway labor situation. In times of peace, entire paralysis of a nation's transportation facilities by a strike of its essential railway operatives is an overwhelm-

ing public calamity. In time of war, when the nation is in peril, a great railway strike might easily cause the collapse and capture of its armies in the field.

During the past quarter century there has been steady progress in the organization of railway operatives into unions and in the federation of these unions to enable them to take united action. In Great Britain, in years previous to the war, the government had several times been obliged to exert its influence to break a deadlock between the companies and the employes. Of course, direct operation of the railways by the government is no panacea against railway labor difficulties, as events in different countries have fully proved. Such recent events as the strike of the police force in London, in Cincinnati and Boston and of the fire fighting forces of Pittsburgh, in August, 1918, are illustrations of the fact that the employment of labor directly in the service of the community does not prevent it from making organized demands and backing them up by the strike.

There is no doubt, on the other hand, that organized labor can be better dealt with by the government as an employer than by a private corporation. In dealing with labor matters nowadays, the attitude of the men themselves is all important, and their attitude toward the government—especially a democratic government, of which they realize themselves a part—is inevitably far different from their attitude toward a private employer.

At the time the British Government took control of the railways, an agreement was in force between the companies and their employes fixing the wages and working conditions. This agreement had been made in 1911 as a result of conciliatory efforts of the government officials of the Board of Trade, and was to expire November 30, 1914. It was obvious that a conflict over its readjustment under war conditions, or even the danger of a conflict, was to be avoided, if possible. The government in October, 1914, concluded an agreement with the Union leaders whereby the arrangement made in 1911 was to be continued.

The conditions at that time were peculiarly favorable for the making of such an agreement. The patriotic spirit of the nation was at fever heat. The railway employes, who have long favored the nationalizing of the railways, had heartily welcomed the taking over of the railways by the government. Besides this, unemployment was prevalent. The paralysis of business and industry at the outbreak of the war had not yet been broken. Under the existing circumstances, the railway employes doubtless felt they were being fairly treated by a continuance of their old wages, and they accepted the extra work and more onerous conditions of service resulting from the military traffic as part of the fortunes of war.

Hardly anyone at that time foresaw the sweeping changes in prices and values that were close at hand. The British railway employe—and for that matter, the British employe in nearly every occupation—works for wages which are so far below the standards to which Americans are accustomed that the constant wonder is how they live. One answer to the problem is that where a low standard of wages prevails, most of the elements that make up the cost of living are likewise low.

The margin of the British railway worker's wages over his cost of living, however, is inevitably much narrower than that of the American railway worker in a similar grade. When the war had been in progress a few months and the prices of food and fuel, shelter and clothing had started on their long journey upward, the railway employes demanded an increase in wages to correspond to the increased cost of living, setting the amount at 5s. per week.

Into the conferences over this demand, the representatives of the companies entered. While their rental was secure for the period of the war, they looked forward to the time after the war when the railways would be turned back to them, and knew that it would be a hard matter to reduce wages after they had once been raised. The result of bargaining between the representatives of the men, the companies and the government was the grant to the men of a "war bonus,"

fixed at 3s. per week for those whose wages were 30s. or more, and 2s. per week for lower paid men. This meant an increase in the railway payrolls of nearly \$20,000,000 per annum.

This was but the beginning of a series of demands by the railway workers for higher wages to keep pace with rising prices, demands which were justified also by the increases in rates of wages paid to other war workers. In the fall of 1915, the "war bonus" which had been fixed in the spring at 3s. was increased to 5s. A year later there was widespread agitation for an increase in the war bonus and the date was fixed for a strike to enforce the demands. An agreement was finally concluded on September 20, 1916, by which employes over 18 years of age had their war bonus raised from 5s. to 10s., and those under 18 years were raised from 2s. to 5s. Six months later, in April, 1917, the war bonus was raised to 15s. per week.

In the following summer a further readjustment was effected between the Union representatives and the railway offices, which altered rates for overtime and Sunday work and effected a further considerable increase in the payroll.

At about the same time the locomotive engineers and firemen made demands for the establishment of an 8 hour day, prompted thereto, there is hardly a doubt, by the success of a similar movement by locomotive engineers and firemen of the United States.

This movement came the nearest to serious results of any railway labor difficulty since government control was established. It was difficult and even dangerous for the government to grant the demands of the men. While on its face a demand for a shorter day, it was really a move for a much higher wage scale. Obviously, with the force depleted by enlistment in the army, and with the enormous traffic to be moved, it was out of the question to reduce the working day to eight hours. The adoption of the 8 hour day would have meant an enormous increase in payments for overtime work. Heavy as this burden would have been, it might have been carried had that been all; but the government, had it conceded

this demand, would have established a precedent. If the 35,000 locomotive engineers and firemen were granted an 8 hour day, the 400,000 other railway employes would have been prompt to demand a similar ruling in their behalf and the demand could not have been refused. Moreover, with an 8 hour day for railway workers, an 8 hour day for the millions of munition workers, coal miners, ship builders, and so on, all through the unionized trades would have been well-nigh inevitable.

A nation at war must, for its own safety, conserve its financial strength as carefully as it does its military strength. It was, therefore, highly dangerous for the government to grant the demands of the locomotive engineers and firemen. The president of the Board of Trade, Sir Albert Stanley, answered the demands with the statement that the 8 hour day was an impossibility under war conditions. Pressure was brought to bear upon the men from every source, including the influence of patriotic leaders of the Labour party, who emphasized the fact that the demand was contrary to the "truce" entered into between the government and the labor leaders at the outbreak of the war. Conditions became so acute that the delegates of the engineers' unions announced that a strike would be ordered unless these demands were granted within 24 hours. The government replied with a proclamation declaring a strike illegal until arbitration by the Minister of Labor had been tried. Settlement was finally effected, and the strike was declared off; but Sir Albert Stanley pledged as one of the conditions of settlement that during the period of government control of the railways after the war, an opportunity would be afforded for appeals from the men for a shorter work day, which would have immediate and sympathetic attention.

The conditions during the fourteen months intervening between the conclusion of the armistice and the signing of the peace treaty have been, in some respects, more trying even than during the war. Prices of the necessities of life have been higher than during the war, and the patriotic fever that

burned high while the issue of the war was doubtful has been succeeded by the inevitable reaction. Labor conditions have been tense in all industries: and the demands of railway labor culminated in a general strike in the summer of 1919 of substantially all railway employes.

A notable feature of the strike was the extent to which the public rallied to the support of the government and showed an understanding of the fact that the government was representing the public welfare in its refusal to concede the demands of the employes. The strike lasted for a week. The interruption to business and industry was, of course, enormous. On the other hand, England is a small country. Distances are short. All the army motor trucks were at once put into service to replace as far as possible the railway in distributing perishable necessities like milk and meat. The railway workers did not expect the firm resistance which the government displayed, and at the end of a week consented to a compromise and returned to work.

Whether the railways will be eventually turned back to the companies or permanently retained by the government is apparently not finally decided; but all the probabilities favor the latter course. A great body of popular sentiment favors nationalization; and the owners of railway securities are fully aware that the change in conditions resulting from the war makes it practically impossible to restore the labor conditions which prevailed before the war and which enabled the British railways to remain solvent under their enormously heavy capitalization. Under those conditions the owners may well prefer to sell out to the government on any reasonable terms rather than take back their property and attempt to earn profits from its operation.

CHAPTER V

Railways in the United States

The government of the United States did not assume control of the railways until nine months after the declaration of war. If plans for such control had ever been made by the military or other government authorities, it is unknown to the public. It is safe to say that in this, as in most other planning with relation to the war, the United States was wholly unprepared. Like many other matters in connection with the United States' procedure with reference to the war, the assumption of control over the railways came when necessity dictated, and not as the result of a policy logically planned in advance.

When the United States entered the war, there were very few, probably, who did not believe that the railway companies would be able to satisfactorily carry on their business during the war without interference from the government. Throughout the business community, indeed, the sentiment was strongly adverse to government control.

And yet a few months earlier, before war was declared, the federal government had interfered in the affairs of the railways in a way that had great influence undoubtedly in preparing men's minds for the taking over of the railways by the government, which occurred at the close of 1917.

THE ADAMSON LAW

In the early summer of 1916, unions representing all the railway trainmen of the United States presented demands on the railways for the establishment of an 8 hour working day in train service. Probably the largest scale collective bargaining ever undertaken in the world was that which was carried on at the long daily sessions of the heads of the trainmen's unions with the committee of railway managing officers

held day after day on the stage of the Engineering Societies Building in New York City, while the auditorium was filled with delegates from the different local branches of the unions, keeping close tab on their representatives.

When a deadlock came at the end of long conferences, the scene was shifted to Washington, where the government at both ends of Pennsylvania Avenue surrendered to the demands of the trainmen and enacted an 8 hour law at their dictation, rather than have the country's traffic paralyzed by a nationwide strike.

It was the most threatening labor difficulty which the United States had ever faced; and the fact that it was terminated by direct action by the federal government awakened men to a new realization of the inherent dangers in the railway labor situation and to the importance that the federal government, in the tense international relations then existing, should be in a position where it could take prompt and decisive action.

THE RAILWAY COMPANIES' FINANCES

No less important than the railway labor situation was the situation of railway finances. The rates of fare and freight which the railways could charge were fixed by law and custom and the rulings of State and federal regulating commissions. By the middle of 1915 the value of the dollar, as measured by its purchasing power, began a rapid decrease. That meant that the railways had to pay more for all their materials and had to raise employes' wages because of the increased cost of living; but the commodity the railways produced (transportation) had to be sold at the old price. The only thing that saved the railways from a rapid descent to bankruptcy was the very heavy traffic which the business prosperity of 1915 and 1916 furnished, and which partially offset the increase in operating expenses. By the end of 1916, however, the traffic had grown on many roads to the congestion point, so that the cost of handling it was increasing faster than the revenues.

The railway companies should have expended large amounts

of money from 1913 to 1917 on the enlargement of terminals, on the purchase of cars and locomotives, on repair shops and on improvements in a permanent way; but during these years of steadily increasing traffic the railways were spending barely enough on improvements to keep the wheels moving. They could not do it out of surplus earnings for the surplus was too small, and with expenses growing faster than earnings, their credit did not permit borrowing on a large scale.

It should be recorded, of course, that the railways had repeatedly appealed to the Interstate Commerce Commission for permission to advance their rates. There was long delay in acting on the appeal and then came refusal, followed later by a partial consent. The experience of the years from 1914 to 1918, in fact, conclusively proves that long delays in making changes in rates on railways or other public utilities under present commission control may cause grave harm to the public interests.

While it is true, therefore, that the railways lacked the capacity to accommodate the heavy traffic that came upon them in the fall and winter of 1917, it was not because of incompetence in management, but because the companies had been financially unable to do the work they well knew should have been done.

WHY CONSOLIDATED OPERATION WAS NECESSARY

It was obvious to experienced railway officers, as soon as the United States entered the war, that the railways ought to be operated for the war emergency as one system. Even the brief experience in the movement of troops and supplies to the Mexican border, a short time previous, had demonstrated this.

For years progressive officers of the railways had labored diligently, through such organizations as the American Railway Association and the Master Car Builders' Association, to bring about such voluntary cooperation between the individual companies as would result in general benefit to all the railways and to the public. A vast amount of good had been

done in this way; but it was limited by the lack of legal authority. Companies which found it more profitable to disregard the rules of the associations than to obey them often neutralized the work done.

The railways had, in fact, gone just as far in cooperating with each other as the law against combinations permitted. Well understanding the need of complete cooperation to meet the war emergency, they sought to effect it by the only method the law allowed. A general committee made up of some of the ablest railway officers in America was created, and it was announced that this committee would *direct* the operations of all American railways.

There was no possible way, however, to clothe the committee with the legal authority necessary to make its control effectual. Not that there was any general disposition to go contrary to the committee's directions. The railway officers were patriotically anxious to work for the national welfare. It was easy to see, however, the grave difficulties ahead. It might, for example, be desirable under the war emergency so to operate the railways that the business of Company A would suffer very seriously, while the business of Company B would be enhanced. Would the president of Company A be legally justified in so operating his road as to sacrifice the interests of its owners, the stockholders, simply because a body with no legal authority (the National Railway Committee) requested it?

This is but a single illustration of the many legal and practical difficulties in operating the railways of the country as a single system, so long as the individual companies continued in control. Even if there had been no great financial difficulty looming up ahead and no wholesale demands from railway labor, the establishment of complete government control over the railways was a necessary step if the railways were to be operated as a single system; and it was in fact recommended by the Interstate Commerce Commission, after the operation by private companies under war conditions had had a thorough trial.

CONTROL BY A DIRECTOR GENERAL

President Wilson in his proclamation announcing the taking over of the railways by the government, placed the supreme authority in the hands of Secretary of the Treasury McAdoo, as Director General. In Great Britain the government authority over the railways is centered in the president of the Board of Trade, which corresponds roughly to our Interstate Commerce Commission. This officer, however, interfered little with the detail operations of the railways; in fact the British railways have been run about as if all the owning companies had been consolidated into one, with the general managers of all the different companies acting as a Board of Directors, which board is responsive to every demand of the military authorities.

Government control in the United States has been conducted in a different way. Mr. McAdoo, in the position of Director General, did not delegate his powers to anyone, but became the actual chief executive and absolute authority over the entire railway business of the country.

One would search far to find a case where one man has exercised such a measure of power over so vast an aggregation of capital. The railways of the United States, over which he held sway, operate over nearly 400,000 miles of tracks and control nearly one-third of the entire railway mileage of the world.

Mr. McAdoo resigned after a year's service, and President Wilson appointed as his successor Walker D. Hines, former general counsel of the Atchison, Topeka & Santa Fé, and generally recognized as one of the ablest of railway officers.

PUBLIC DEMANDS RETURN TO PRIVATE OWNERSHIP

After two years' experience in government control, there is a practically unanimous demand on the part of the business community that the railways be returned to the companies. The general verdict is strongly condemnatory of the government operation. It is even declared that the government ought not to have taken over the railways at all.

This is the public verdict as voiced by almost the entire public press. It expresses the sentiment of business and professional men and of the leaders of public thought.

Organized labor, on the other hand, and that large body of voters which protests against the established order of things, has exerted all its influence to have the period of government control extended. It has declared its belief that there has been a conspiracy of those in authority to operate the roads badly so as to make government ownership and control unpopular and ensure the return of the railways to the private companies.

HAS GOVERNMENT OPERATION OF RAILWAYS BEEN FAIRLY TRIED?

Both of these opposing parties believe that we have actually had during the past two years a practical test of government operation of railways, and that it has worked badly. The fact is, however, that the railway operations during the past two years furnish no test whatever of government operation as a permanent policy. The further fact is that the operation of railways during the past two years has been *on the whole* remarkably successful, and not at all the dismal failure that the public so firmly believes.

These statements will, of course, be received with incredulity. It is necessary, therefore, to state fully the ground on which they are based.

The Decline in Railway Net Earnings

The ordinary and proper test of the successful operation of a railway is the financial test. The railway manager who increases net earnings is held to have proved his ability. The manager under whom earnings fall off is discharged as incompetent.

The legislation under which the control of the railways was taken over provided that the government should pay an annual rental to the railway companies equal to the average net earnings for the three years preceding federal control.

Six months after government control was established, a

horizontal increase of rates was ordered by Director General McAdoo. Freight rates were raised 25 per cent and passenger rates were increased to 3 cents per mile. In addition to this, an internal revenue tax was placed on both passenger and freight charges.

With the establishment of federal control and the operation of the railways as a consolidated system, numerous economies became possible through the elimination of expense due to competition of the different companies with each other. Great publicity was given to these savings, effected by the Administration.

Notwithstanding these economies, the large increase in rates and the record breaking volume of traffic, the net earnings of the railways have fallen far below the amount necessary to pay the standard return to the companies. The deficit for the two years will probably exceed half a billion dollars, and in addition, the physical condition of the railways has deteriorated materially.

The Increase in Railway Wages

The chief reason why railway net earnings have fallen off is the great increase in railway wages. The public believes that the railway employe is a profiteer, who is receiving higher wages than are warranted and has been unduly favored by the federal administration in its grant of increased wages and better working conditions.

In order to determine the truth concerning this, there are here presented tables and diagrams comparing the increase in railway wages and the increase in prices of commodities. The changes in prices and in railway wages are shown from 1903 to the present time, the average prices and wages for the three years' period—1903 to 1905—being taken as 100 per cent.

A comparison is also made of the prices and wages of 1913 and the increase which has taken place since. The figures for railway wages are taken from the official reports of the Interstate Commerce Commission and the federal Railway

Administration. The figures for wholesale prices are the index numbers published by R. G. Dun & Co. It may be remarked here that the United States Bureau of Labor index figures show a materially greater increase of prices in 1917, 1918 and 1919 than the Dun figures.

It will be seen from these tables and diagrams that in 1916 and 1917 the railway employes were hard hit by the increase in the cost of living and that the increase of wages which the

TABLE I
AVERAGE ANNUAL EARNINGS OF ALL RAILWAY EMPLOYEES
1903 TO 1919¹

Year ending June 30	Total amount paid all railway employes (1 = 1000)	Total number of railway employes (1 = 1000)	Average earnings per employe	
			Per year	Per month
1903	\$775,942	1,312	\$591	\$49.25
1904	817,598	1,296	631	52.58
1905	839,945	1,382	609	50.75
1906	932,400	1,521	613	51.25
1907	1,072,386	1,672	641	53.41
1908	1,935,438	1,436	721	60.08
1909	988,324	1,503	659	54.91
1910	1,143,725	1,699	673	56.08
1911	1,208,466	1,670	724	60.33
1912	1,252,347	1,716	737	61.41
1913	1,373,830	1,815	763	63.60
1914	1,337,344	1,640	815	67.91
1915	1,134,666	1,366	831	69.25
1916	1,366,101	1,599	854	71.16
1916 Yr. ending Dec. 31	1,468,576	1,647	892	74.33
1917	1,739,482	1,733	1,004	83.66
1918	2,581,885	1,821	1,418	118.16
7 months ending July 30 1919	1,513,227	1,852	1,401	116.73

In the returns for 1906 the pay of employes of the Southern Pacific Co. was not reported and in place of the actual figures there has been used an average of the Southern Pacific payments for 1905 and 1907. A similar correction is used for the payments by the Chicago, Milwaukee and St. Paul in 1903.

For the year 1908 and following, the returns of switching and terminal companies are not included. For the year 1913 the returns cover Class I and Class II companies only. For the year 1914 and following the returns cover Class I roads only.

Figures for the years 1903 to 1914 are taken from the Statistical Reports of the Interstate Commerce Commission for the year ending June 30, 1914. Figures for the years 1916 and 1917 are from the published reports of the commission. Those for 1918 and 1919 are obtained from the federal railway administration.

¹ Statistical reports of the Interstate Commerce Commission.

federal Administration granted them in 1918 and 1919 was not sufficient to offset the increase in the cost of goods.

Had the railways continued under private control, instead

TABLE II

COMPARISON OF INCREASE OF COST OF LIVING AS SHOWN BY INDEX NUMBERS FOR WHOLESALE PRICES AND INCREASE IN RAILWAY WAGES 1903 TO 1919

Year	Dun's Index No. of Wholesale Prices Aver. for 12 Mos.	Aver. yearly earnings of all railway employees	Percentage of increase over aver. for the 3 yrs, 1903 to 1905 Wholesale prices	Railway wages
1903	\$99.3	\$591		
1904	99.7	631		Increase
1905	100.6	609		Per cent
1906	106.3	613	6.4	0.5
1907	111.6	641	11.7	5.0
1908	109.8	721	9.9	18.2
1909	117.8	659	7.9	8.0
1910	118.8	673	18.9	10.3
1911	116.8	724	16.9	18.3
1912	124.3	737	24.4	20.8
1913	120.9	763	21.0	25.1
1914	122.2	815	22.3	33.6
1915	126.4	831	26.5	36.2
1916	148.8	854	48.9	40.0
1917	204.1	1,004	104.2	64.6
1918	229.2	1,418	129.3	132.4
1919 (6 mos.)	224.4	1,401	124.5	129.6
1919 (12 mos.)	230.8		130.9	

TABLE III

COMPARISON OF INCREASE OF COST OF LIVING AS SHOWN BY DUN'S INDEX NUMBERS FOR WHOLESALE PRICES AND OF INCREASE IN RAILWAY WAGES OVER 1913

Year	Dun's Index Number of Wholesale Prices			Railway wages		
	Aver. for 12 mos.	Actual	Increase over 1913 Per cent	Aver. for year ending June 30	Actual	Increase over 1913 Per cent
1913	\$120.9			\$763		
1914	122.2	1.3	1.0	815	\$52	6.8
1915	126.4	5.5	4.5	831	68	9.0
1916	148.8	27.9	23.0	854	91	12.0
1917	204.1	83.2	68.8	1,004 ^a	241	31.6
1918	229.2	108.3	89.5	1,418 ^a	655	85.8
1919 (7 mos.)	224.2	103.3	85.4	1,401 ^b	638	83.6
1919 (12 mos.)	230.8	109.9	90.8			

^aYear ending Dec. 31.

^bFigures cover period from Jan. to July inclusive.

FIG. 1. INCREASE IN COST OF LIVING (R. G. DUN & CO.'S INDEX FIGURES) AND RAILWAY WAGES FOR A PERIOD OF SIXTEEN YEARS

(Percentage of increase for both prices and wages is the increase over the average of prices and wages for the three years, 1903 to 1905, which is taken as 100 per cent.)

of being taken over by the government, wages would have had to be increased just the same. In fact, the increases in wages to railway employees have been less than the increases to factory workers.

The New York Bureau of Labor in December, 1919, reported the average earnings of all factory employees in the State as \$25 per week, an increase of 100 per cent over 1913. The average earnings of all railway employees in 1919 were \$27 per week, an increase of 83 per cent over 1913. Remembering that a large proportion of factory employees are girls and women and unskilled workers, and that fidelity to duty and reliability are very important in the railway employee and deserve proper compensation, the conclusion is inevitable that the increases in wages made by the federal Administration are certainly no more than were deserved.

It is worth while to note further the showing of the diagrams that in the seventeen years since 1913 the increase in

FIG. 2 PERCENTAGE OF INCREASE IN COST OF LIVING AND OF RAILWAY WAGES DURING THE WAR PERIOD

railway wages has on the whole no more than kept pace with the increased cost of goods. That means that the average employe today can buy no more with his wages and live no better than he could 16 years ago, when he earned \$591 a year, or slightly over \$49 per month.

IS RAILWAY LABOR EFFICIENT?

But those who indict the federal Railway Administration declare that its yielding to the railway employes on the eight hour day and on other matters where conditions of working are concerned, has also been responsible for a great increase in railway expenses. There is a certain measure of truth in this charge. The eight hour day, it is fair to recall, however, was established in train service by the Adamson law fifteen months before the government took over the railways. Its general extension to all classes of railway employes was sooner or later inevitable. A number of other concessions were made to the railway employes, for some of which, very likely, the Administration may properly be criticised.

In dealing with the general question before us, however, we must look at the broad, general results in order to reach sound conclusions, and not at minor details. It is possible

to determine from unimpeachable statistics whether there has been actually a great falling off in the amount of work done by the average railway employe.

If the eight hour law and the other concessions in working conditions have really greatly reduced the amount of work done per employe, then there would have to be a large increase in the number of employes. Indeed, a large increase would be looked for anyway, for there has been a great increase in the volume of traffic handled. The ton miles of freight traffic were 25 per cent greater in 1918 than in 1913 (409 billion in 1918, and 301 billion in 1913). But actually the number of employes in 1918, the first year of federal control, was only 3 per cent greater than in 1913, nothing like as large an increase as the growth in traffic would call for.

Of course, in 1918 there was a great scarcity of labor. The railways got along with as few employes as possible, and did as little as possible in the way of maintenance, repairs and improvements. In the first six months of 1919, however, when plenty of men were obtainable, the number of employes was not much increased.

Surely the above figures are a complete answer to the common belief that the federal Administration has granted higher wages or better working conditions to employes than justice demands.

WHAT THE RAILWAY ACCIDENT RECORD PROVES

There is still another way to test the efficiency of the government in its dealing with the employes. It is charged that the easy concessions to the employes and the recognition given to the railway labor organizations have destroyed *morale* and discipline. If that were true, there would be an immediate effect on the accident record. The remarkable safety of railway travel is only made possible by the thorough organization of the operating force and its subjection to discipline. If this discipline were relaxed so that the employes became neglectful, an increase in the accident record would be inevitable. The carefully kept statistics show no evidence whatever of such an increase.

ELECTRIC RAILWAY FINANCES ARE IN WORSE SHAPE

There is another interesting parallel that should be drawn. The public condemns the federal Railway Administration because of the financial deficit of the steam railways. The electric street and interurban railways are in much worse financial condition than the steam railways, and they were not taken over by the government but were left in the hands of the companies. It would be as sensible to say that the street railway collapse demonstrates the failure of company control as that the steam railway deficit shows the inefficiency of federal control.

The fact is, of course, that the real reason why both steam and street railways are on the rocks financially is the great change in the value of the dollar and *the fact that the public does not yet understand this change.*

The increase in railway freights and fares put into effect in 1918 was not nearly enough to counterbalance the change in the value of the dollar. Measured by an absolute standard of value, freights and fares are not higher but lower today than ever before. The dollar the railway receives is only worth what it will buy. It will buy today so much less coal and steel and lumber and labor that the railway is in exactly the same position as the man on a small salary, which has only been slightly increased, and who is wrestling with the problem of how to pay his living expenses and the interest on his debts from his income.

The public verdict that the financial results of the railways demonstrate the failure of federal operation is, therefore, an unjust one, based on a complete misunderstanding of the facts.

WHY RATES WERE NOT RAISED HIGHER

It has been said that Director General McAdoo or his successor should have put into effect a greater increase of freights and fares so that the railways might have shown better financial results.

If the railways were a private business, that would doubt-

less have been done. What other industry than railway transportation has passed through the war and raised the price of its chief product only 25 per cent? But railway transportation is not a private business. One of the chief reasons why the business community condemns the Railway Administration is because it increased rates as much as it did. There are plenty who believe that if the companies had only been left in control, there would not have been any such raise in rates. A large part of the public demand for return of the railways to the companies is due to the belief that the companies will restore their former rates.

NO REAL TEST YET OF GOVERNMENT OPERATION

The public is not only mistaken in its idea that the federal Railway Administration has been a monumental failure; it is equally mistaken in its belief that any real test of government railway operation has been made. The operating force which has carried on the railways during the two years of government control has been the same force and the same officers who did the work previously, when the companies were operating the roads. There were a few changes only in the officials at the head when Mr. McAdoo took charge, but there was no introduction of politics or favoritism into the service. The men placed in authority were nearly all of them men who had won distinction as railway officers.

It is only necessary to compare the way in which the government carries on business which is under its entire control and the way the railways have been run during the past two years to satisfy anyone that whatever faults and blunders are chargeable to the federal Railway Administration, they are trifles compared with the waste and inefficiency which prevail unfortunately in most of our government business.

Were the railways to be taken over and permanently operated by the government, as appears at the present time only too probable at no distant day, we shall have appointments to official positions in railway service either made for political reasons, or else controlled by the fatally mechanical

routine of civil service examinations. We shall see necessary work on our transportation lines suffering fatal delay until Congress makes an appropriation. We shall see an exodus of able men from the railway service because the low standard which Congress sets for the compensation of men of large responsibility drives away all but mediocre men from the government service.

This is but a beginning of the catalogue of what direct government operation of the railways would mean. It is to be hoped that some of the greatly needed reforms in our governmental machine needed to make it operate with anything like efficiency may be carried into effect before the railways are finally turned over to the government, if that event does occur.

While we have not had a real trial of government railway operation during the past two years, we have had an object lesson as to some of the evils which government operation is almost certain to bring in its train. Perhaps the most important of these is overcentralization.

Director General McAdoo did well to establish a tribunal to hear wage appeals when he took control. The work done by the Railway Wage Board, headed by Secretary Lane, was a more thorough investigation of the railway wage situation, doubtless, than any that any railway company had ever undertaken. The permanent board on railway wages and working conditions, on which the employes have representation, is also a notable achievement. On the other hand, the concentration of all wage decisions at Washington and the attempt to apply wage rates to the whole country and all classes of service alike is both wasteful and unfair. There are great variations in the cost of living in different parts of the country. A wage that will barely keep section hands from deserting to other jobs in the neighborhood of large cities gives the colored track laborer in the South such riches that he prefers to work only half the time, or less, to have leisure for his enjoyment.

This undue centralization applies also to other matters. Standardization of rolling stock was given an undue import-

ance, which delayed for months the placing of coal and locomotive contracts. A great construction program of much needed work on terminals and tracks was planned for 1918; but because a single board had to pass on work covering the entire country the work was delayed until far into the summer.

One of the most unfortunate blunders of the Administration was its magnification of the position and authority of the Director General. Mr. McAdoo discharged 400 railway presidents and other high salaried executive officers. He held that their services were not necessary for the operation of the roads and that where their work was required for carrying on the corporations they should be paid by the corporations and not by the government.

It is undoubtedly the case that many of the railway presidents thus discharged were not rendering service as operating officers at all proportionate to the salaries they received. There have been many cases where railway presidents have drawn large salaries through the influence of some banking house which held control of the property and not because they were expert railway officers. Such methods of dissipating railway revenue are of course properly put an end to under government control.

On the other hand, the summary discharge of so many men of high reputation in the railway service, many of them of known great ability, spread a feeling of more or less doubt and uncertainty through the entire official organization.

In the place of the discharged presidents, Mr. McAdoo set up an entirely new operating organization with seven "regional directors," reporting to Mr. McAdoo, district directors under the regional directors and in charge of subdivision of the regional areas, and federal managers, general managers and terminal managers under the district directors.

The centralization thus effected was not of benefit to the service. Even though the men selected were capable railway officers, it takes much time for any such radically new organization to get into working order, so that responsibility will be defined and smooth operation will be possible.

It is not generally realized that the source of efficiency in the railway service does not lie at the top. It is the rank and file of the operating officers, from general managers all the way down to the foremen, on whose initiative and fidelity we must rely for safe and efficient operation of the railways. These men did hard and patriotic service during the war; but their sense of loyalty to the companies they served, their feeling of responsibility, their desire to receive credit for good work performed, were all seriously hurt by the sweeping changes in organization established by Mr. McAdoo. These men are strongly condemnatory of federal control, from their experience.

It became evident by the time Mr. McAdoo had been in power a few months that what he planned was no mere emergency use by the different railway companies of each other's facilities. He aimed to bring about the practical consolidation of the railways of the United States into one operating organization, with all the changes that would be made were the consolidation to be permanent. All the machinery of competition was wiped out: advertising in every form was stopped; soliciting freight and passenger agents were discharged; competitive train service for both freight and passengers was cut off. Terminals were put to joint use, the most notable instance probably being the hundred million dollar terminal of the Pennsylvania Railroad in New York City. This was built for the distinct purpose of giving the company an advantage over its competitors for through passenger service, but was freely opened to its old time rivals. Insurance formerly carried by many of the companies was canceled and the government carried its own insurance. The great railway supply industry, with a normal production of some \$2,000,000,000, found competition among its customers wiped out and only a single customer, the government, to deal with.

It was inevitable that these sweeping changes, upsetting to the employment and business and customs of thousands and hundreds of thousands of men, should create widespread

criticism. Much of this would have been inevitable. Much of it might have been averted, however, had a less radical policy been pursued.

For many things, the Administration deserves much more credit than it has received. The barring out of politics from the organization, the selection of able men for important responsibilities and paying salaries sufficient to secure and hold such men—all these and similar well judged actions were of the greatest service to the country. Credit is due also for carrying out many reforms and economies which have long been urged by progressive railway men, but were impossible as long as the railways were operated by independent companies.

On the other hand, the Administration erred in centralizing too much the control of railway operations; it erred in some of its arbitrary orders and methods. It erred especially in sweeping aside small conveniences of the traveler and the shipper, which had grown up under the competitive system and whose loss is largely responsible for the deep resentment toward the government administration of the railways which the public undoubtedly feels.

The abolition of the privilege of reserving berths by telephone, the consolidation of ticket offices, making long trips a necessity to buy tickets and long standing in line to obtain them—these and similar petty annoyances have had far more weight in influencing business men against the federal railway administration of railways than have the really important arguments against government control.

CHAPTER VI

Public Utilities in the United States

The economic changes resulting from the war have had a marked effect on the street railways, gas and electric lighting companies of the United States, and of all other public utilities rendering municipal service. Notable changes in the relations between these companies and the public have resulted.

In the United States more than in any other of the leading industrial nations the operation of municipal public utilities has been left to corporations operating under franchises for the use of the streets. With the exception of water supply, it is the rare exception where an American city owns and operates any of its public utilities. The endeavor to curb the financial and political power of these franchise holding companies has been one of the chief features of governmental reform movements for the past forty years.

It is already apparent that the changes resulting from the war are certain to have a profound influence in altering the relations between the franchise companies and the public.

The chief of these changes is the great fall in the value of the dollar, as measured by its purchasing power. Every economist knows—in a theoretical way, at least—that the dollar is not a fixed unit of value; but how few business men or men in public life have had any practical understanding of the varying value of the dollar and its results? The rates which a street railway or a lighting company may charge for its service have often been fixed in its franchise, or have been determined by statute or by long contested litigation, or by commission rulings. None of the eminent lawyers or financiers or business men who framed these franchise agreements or contracts or court orders had any realization that the dollar is not a fixed standard of value.

The fall in purchasing power of the dollar during the past four years has placed a large proportion of the public utilities in financial straits. It could not well be otherwise. The increased cost of living compelled the raising of wages and the market prices of materials were often doubled or trebled in 1918 over 1914; but in nine cases out of ten the companies were still obliged to sell their product at the old rate.

STREET RAILWAYS SUFFERED MOST

The street railway companies were the most seriously affected because other changes had been operating for years to reduce their margin of profit. The five cent fare was established in the early days of the electric railway, when lines were short, wages low and the light and cheaply built lines earned large profits. Those were the palmy days of electric railway promotion and franchise grabbing, when every privilege to operate a railway in a city street appeared to be a gold mine.

The street railway magnates of that day had "the nickel fare" as their slogan. Rather than consent to any reduction in it, they gave free transfers. Not a man in the street railway industry foresaw twenty years ago that the day was coming when the nickel fare would be the ruin of many a street railway company.

As time went on it was found that the cost of maintaining track was far higher than had been anticipated. The extension of the systems increased the average length of a journey without increasing the revenues. During the past four years the jitney bus and the privately owned automobile have diverted millions of passengers from the street car lines.

All these and other causes have been gradually reducing the profits of the street railway companies and, to a lesser extent, of other public utilities. Had these conditions not been partially offset by the great increase in business, financial disaster would have come long ago. As it was, the entry of the United States into the war found many companies close to the edge of the precipice.

FEDERAL ACTION TOWARD UTILITIES

The federal government did not take over municipal utilities for operation during the war; but it had to deal with the problems resulting from their situation. The prices of their chief supplies, coal, oil, steel, copper, etc., were generally fixed by federal government boards. The price of their most important supply, labor, was also fixed eventually in many cities by the War Labor Board, a federal government body created as an arbitration tribunal of last resort to harmonize differences between labor and capital.

This board ordered sweeping increases in pay, especially to street railway employes, who ever since the horse car era had been paid very low wages. The great increase in the cost of living, or decrease in the value of the dollar, made such an increase imperative; but when it came to increasing the street car fare or the prices of gas or electric current, the companies found, in many cases, they were running against a stone wall.

In many cases the public authorities of state or municipality did grant an increase, but in many other cases the increase was denied. The ground for the denial was usually the old bargain between company and city, by which the five cent fare was fixed. "You insisted on the nickel fare," said the public officials, "even though it gave you an exorbitant profit. We have a right to insist on it now, even though you lose money by it."

Had it not been for the enormous increase in traffic, the street railways would have suffered even worse. As it was, they were able to continue operations in all save some of the smaller cities; and their disastrous condition did not become fully evident until after the armistice and the falling off in traffic which promptly came.

The federal government had authority to take over operation of the street railways; but when the steam railways were taken, the street railways and the electric interurban lines were specifically excepted in the President's proclamation. The obvious reason at that time was that no such emergency

condition had arisen in street railway service as then existed on the steam railways.

Afterward, when the effect of the war conditions upon the street railways had become evident, there were many appeals for federal government interference. The federal price fixing and the orders of the federal War Labor Board had enormously increased expenses; hence it was held the federal authority should be exercised over the State and municipal authorities to compel readjustment of fares.

President Wilson's administration had troubles enough on its hands, however, without projecting itself into this strained situation. So long as the street railways in industrial and commercial cities were able to continue operation there was no disposition to interfere. Had any serious stoppage of street transportation occurred, no doubt the federal authority would have been exerted to any extent to reestablish it.

In fact, the various federal war agencies cooperated with the utility companies to keep them from suspending service. Priorities were offered them for obtaining necessary supplies of steel and coal and oil and copper. The government itself furnished the money for street railway extensions to reach munition plants and shipyards. Just before the armistice, plans were completed for an expenditure of \$200,000,000 by the government on power station construction, to supplement the demand for power to supply the street railways and electric central stations and industrial plants along the Atlantic seaboard section, where the demand for power had outrun the supply.

The conditions resulting from the war are likely to have a far reaching effect upon the relations between the utilities and the public. That there must be a radical readjustment of these relations is everywhere admitted. At one time it seemed likely that a broad movement toward municipal ownership of public utilities would result. Later, there occurred, so far as one may judge from current expressions in public journals, a certain revulsion of public sentiment against government operation of industry; but whether this

expresses the real sentiment of the millions of voters is far from clear.

One notable fact is that investors and financiers are far more favorably disposed toward the transfer of utilities to public ownership than they were a few years ago. A sale to the public of properties which have poor prospects of profit ahead appears to them a good solution of the problem.

BOSTON'S "SERVICE AT COST" PLAN

Brief record may properly be given here to the remarkable plan adopted at Boston a year ago to meet the street railway emergency. All the city passenger lines of Boston—surface, elevated and subway—are owned by the Boston Elevated Railway Co. The financial condition of the company had been growing steadily worse, due to the conditions above outlined, and the company had appealed to the State authorities for relief through an increased rate of fare. Relief was imperative, since the company was building extensions which the public authorities had ordered and the company's credit had to be maintained to enable it to raise money for the work.

It was recognized, however, that to order an increase in the rate of fare, with the company still in control, would be severely condemned by the voters. A law was therefore passed by the Massachusetts Legislature which provides for the taking over of the entire property of the company by the State and its operation for a period of ten years by a board of trustees appointed by the Governor. These trustees are to pay from the company's revenues the interest on the company's bonds and a dividend on its stock, at first $5\frac{1}{2}$ per cent, to be later increased to 6 per cent. The trustees must fix such rates of fare as will be sufficient to pay the above charges on the invested capital, and in addition the operating expenses and maintenance of the roads. A scale of fares is to be fixed by the trustees which will effect this, and these fares are to be periodically raised or lowered as may be necessary to keep a stated amount of surplus in the company's treasury.

The conditions were favorable for making this settlement

because for many years all the company's financial and other operations have been under supervision by the Massachusetts Railroad Commission, so that its capital represents cash paid in and not water, and is entitled to a fair rate of return.

This plan, commonly known as the "service at cost" system, met general approval; but the results of its operation have been disappointing. The trustees have inherited the "flat fare" system long in force, and they attempted to obtain the necessary increase in earnings by raising the fare to eight cents. The result was a huge falling off in the short distance riders who yield the lines their profits, while all the long distance riders who are carried at a loss remained. The increase in net revenues was too small to meet the company's necessities. A second increase to 10 cents was then tried, and this met such public opposition that a boycott of the street railways was put in force in various parts of the city. Soon after that, a strike of the entire body of railway employees for a large increase in wages tied up the entire system for several days. The strikers quit work because a decision by the War Labor Board had not been reached in their case. The strike was settled with a large increase in wages to the men.

The operation of the lines on the present wage scale has already produced a deficit of some \$2,000,000 which the State will have to raise from the tax payers.

The final result is likely to be a great extension of municipal and State ownership of street railways and cancelation of old franchises. The companies accept this cancelation today, which they would have fought a few years ago, because the rates which were named in the old franchises are no longer profitable.

The federal government is not likely to interfere in these settlements, although a federal commission appointed by the President has taken testimony in the street railway situation. It is a fact, too, that the tense relations between labor and capital and the general urgency of the whole industrial prob-

lem tends to make such questions as these matters of national concern. We can not let any city or any State get into too serious difficulty in solving these problems, for a blaze of anarchy once kindled at one point might spread with dire results.

CONTROL OF WIRE COMMUNICATION

In Great Britain, as in most other countries of Europe, the telegraph and telephone systems are owned and operated by the government. In the United States, which has the credit for originating both these industries, the business has remained in the hands of private companies. The telegraph business has long been in the hands of two great companies, the Western Union and the Postal Telegraph, between which there is a certain amount of competition. The telephone business has been largely concentrated in the hands of the American Telephone & Telegraph Co., the direct successor to the corporation which originally developed the invention of Alexander Graham Bell, although competing companies, particularly in the rural districts, control in the aggregate a large amount of business.

A few years ago the Bell company acquired control of the Western Union, and effected marked improvements in its service. The arrangement was condemned by the federal authorities, as being an unlawful restraint of competition, and the Western Union was thereupon placed under an independent management.

When the European War began, the United States Government promptly took steps to censor all cable and wireless communications overseas to guard against infringement of the country's international obligations. When the United States itself entered the conflict, this control was extended and made more rigid. No reason appeared, however, for exercising control over the lines of communication on land. The telephone business especially has been conducted with a regard for public obligations and on a sound and conservative financial basis that is in marked contrast with the record of

most other public utilities. Especially noteworthy is the policy which the company has long pursued of expending very large amounts in the promotion of original research to perfect further improvements in its methods and apparatus. The service rendered by the company is, by general agreement, far superior to that rendered in the countries where the business is carried on by the government.

There have been occasional recommendations for government ownership of the telegraph lines; but they have not attracted serious public attention. President Wilson, however, had authority under the emergency war legislation to take over on behalf of the government all lines of "communication" as well as transportation.

His final action in doing this on August, 1918, appears to have been precipitated by a labor difficulty on the Western Union lines. The matter had been submitted to the federal War Labor Board, which had ruled against the contentions of the Western Union president, to the effect that the employees joining a labor union would be discharged. At a time when the support of organized labor to the war program was of great importance, this action by the Western Union official, running counter to the order of the War Labor Board, was most unfortunate. The President's order taking over the telegraph and telephone lines promptly followed.

The lines were placed in charge of a committee, of which Postmaster General Burleson is the head. At one time there were reports that Mr. Burleson would introduce some such radical changes in the telegraph business as were ordered by Director General McAdoo in the railway organization. There is, without question, opportunity for great economies by consolidating the telegraph and postoffice organizations, and greatly increased use of the telegraph might result. There seems good reason to believe that some such reorganization was planned; but before there was time to carry out such plans it became evident that the war was nearing the end. This, with the campaign of newspaper criticism against Secretary Burleson, were probably the reasons why any radical

changes in the telegraph and telephone organizations were not carried out, if they were planned.

So far as the public was concerned, the operation of telegraph and telephone during the twelve months while the lines were under government control suffered very little change. There has been, however, a general and well founded complaint of the great falling off in the quality of the telephone service, and it is customary to hear this ascribed to the government operation of lines.

There is very little foundation for such criticism. The quality of the telephone service has fallen off because during the war the normal expansion of the system was stopped. The demand for copper and for all sorts of telephone and telegraph apparatus for war purposes had priority, of course. The expansion of the telephone system was confined to the lines made absolutely necessary by the requirements of the war industries and the government administration. An enormous number of experienced men in the telephone and telegraph service were called to the aid of the government.

The close of the war, therefore, found the telephone system greatly overloaded, which means, of course, "busy" cables and slow service. It will take many months to install the additional circuits and apparatus necessary to give the telephone system such a normal margin of capacity over its load as it had before the war.

It is obvious therefore that while the war is the primary cause of the defective telephone service now general, the government control of these lines is not to be blamed for these defects.

In fact, it is a little difficult to perceive now what useful service was accomplished by the government control that might not have been equally well obtained with the lines in private ownership.

CHAPTER VII

Shipping

As one follows closely the record of government control of industry during the years since the war began, it becomes evident that that control has been put into effect as fast as necessity dictated, and seldom before. British railways were brought under control at the beginning of the war for military reasons, but no reasons were apparent why the government should exert a like measure of control over the shipping business.

There was of course an immediate requisitioning of ships by the British Government on a huge scale, for use as transports, supply ships and other auxiliaries for the navy. There was no time for the charter of these ships by bargain and agreement in the ordinary way, and the government commandeered the vessels it required. Where charter rates had not already been provided for in advance, as on vessels which were auxiliaries of the navy, arbitration boards were created to fix the price. This system has been extended and developed with the great extension of government operation of vessels, and the rates fixed are known as "blue book" rates. They have ruled materially below the rates which have been earned by shipping engaged in commercial business, but have generally been high enough to yield a very good return to vessel owners.

There were weighty reasons why the government did not go further in its control of shipping at the outbreak of the war. The business of railway transportation is a natural monopoly; the business of water transportation on the ocean by means of the tramp freight vessel, which carries the bulk of international traffic, is about as perfect an instance of free competition as can be found. Government control has seldom been invoked where competition has had free play.

The operation of competition as an automatic force tending

constantly to reduce the cost of service to the ultimate consumer, through the constant stimulus to efficient operation at the lowest cost is admirably illustrated by the history of the shipping trade. As a result of that competition it has come to pass that experience and specific knowledge are especially necessary for success in the shipping business. The prominence of England in this field has been due as much to the special knowledge and experience in the ocean transportation business of her shipowners and managers as to her position as a shipbuilding nation.

There was thus no reason apparent at the outbreak of the war why the government should undertake the control and operation of the British merchant marine, provided its owners were willing to keep their ships in operation, a matter of some doubt in the early weeks when German commerce destroyers were taking toll of British vessels in every ocean.

GOVERNMENT INSURANCE FOR WAR RISK

At this point, indeed, the government had to extend relief by establishing a war risk insurance bureau. True to the British traditional policy of leaving as much responsibility as possible to the individual, the government did not assume the whole burden of risk. Instead, it arranged to help out the vessel owners through certain cooperative insurance associations by underwriting 80 per cent of their risks for 80 per cent of the premiums.

In the United States, a similar, though less acute, problem led to the establishment of a government marine insurance bureau, which provided owners of American vessels with insurance against war risks. The measure was necessary to enable American vessels to continue to be operated and carry American exports abroad, and was enacted practically without opposition.

THE CHANGE FROM FAMINE TO FEAST

The paralysis of business during the early months of the war was reflected in the shipping trade. The unprecedented

interruption of the currents of traffic seemed at the outset to mean a smaller demand for ships. Few foresaw the enormous prices for ocean transportation which were close at hand.

By the close of 1914, the effects of reduced supply and increased demand in the shipping business began to appear. About one-seventh of the world's merchant marine, the vessels of Germany and Austria, were shut up in ports or destroyed. The British Government had taken for war purposes some 1,500 merchant vessels, or about a fifth of the total British tonnage. Many British merchantmen had been sunk by the German raiders. In the British shipyards operations had been greatly interrupted by enlistments in the army and navy, and every effort was being bent toward the construction of naval vessels at the expense of merchant construction. Traffic was so congested in all European ports that ships had to wait a long time for unloading.

All these conditions developed at a time when the urgent demand for ships to carry war necessities was just making itself evident. The result was a sudden astonishing rise in ocean freight rates and in the prices of ocean vessels at the opening of 1915, quite without precedent. In a few weeks' time ocean freights were doubled and tripled. Speculators in ships made fortunes overnight. The shipowners, who a few months before had been filled with worry over the paralysis of trade, found their property suddenly doubled or even quadrupled in value, without an effort on their part.

THE CAUSES WHICH BROUGHT ABOUT GOVERNMENT CONTROL

Even so, there seemed at first no reason why the government should interfere. The shipping business has long been one of alternate feasts and famines. The shipowners held that the war profits were properly theirs to enjoy, in view of the risks they were taking. The absolute necessity of the service tendered by the shipowners to keep Great Britain supplied with food and other necessities and carry similar supplies to the Allies was fully recognized, and it was agreed that the higher the profits of the shipowners, the more energetically would they keep their vessels moving. The high

shipping rates also operated automatically to sort the traffic and cause that to be moved whose importance was such that the shippers were willing to pay the high rates. If rates were lowered, some authority would have to be set up to say what traffic should have the preference.

At certain points indeed the government did exercise a very stringent control over the shipping from the outbreak of the war. On the commercial side it cut off at once all exports to enemy nations and soon restricted those on their way through neutral countries. On the operating side it rigidly controlled the movements of vessels in every particular that military considerations dictated.

The sudden and rapid rise in ocean freights in the spring of 1915 coincided with a rapid rise in the price of food and other necessities of life and gave rise to public agitation to have the government take over the shipping business, or fix freight rates. In response to this demand, the government requisitioned in April, 1915, the entire business in the importation of refrigerated meat from Australia, New Zealand and South America. The large use of these meats for the supply of the Allied armies gave a special reason for this action.

By the close of 1915 control over shipping was further extended. A special committee was created made up of experts in ocean transportation, with authority to see that the food necessities of the nation were provided for from overseas at a reasonable rate. This committee acted with decision and made requisitions of shipping space for the importation of food on a huge scale. Its action effected a reduction of over 50 per cent in wheat freights across the Atlantic before the close of 1916. At the same time, the movement of vessels was brought more directly under government control by the requirement that every vessel of over 500 tons must obtain a special permit for every voyage.

SHIPS NECESSARY TO WIN THE WAR

It was by this time clearly evident that ocean shipping was one of the most urgent necessities in order to win the war. The depredations of the German submarines were steadily

reducing the tonnage available to bring food and raw materials to Great Britain and enable her industrial plants to supply munitions to her Allies. The attention of the nation had been so concentrated on the immediate needs of the army and navy that the building of cargo vessels had been markedly reduced. By the spring of 1916 the tonnage of merchant shipping still in service was only about two-thirds that which existed at the outbreak of the war.

Under these conditions, direct action by the government was obviously necessary. Shipowners were urged by the government to order more ships from the builders and to buy largely abroad, and were promised they would be allowed to make profits enough from the vessels to recompense them for the high prices charged by the shipyards. An elaborate scheme for the regulation of imports was put in force, with the object of restricting the use of shipping space to bring in bulky or heavy articles, such as baskets, cement, furniture, stone and plate. A long list of nonessential luxuries and articles obtainable from home manufacture was added. In order to relieve port congestion so as to permit the more rapid discharging and loading of steamships, a special port committee was organized, with power to take command in case any local port authorities proved incapable of properly discharging their responsibilities. This committee caused the return from the army and navy of the skilled dock workers who had enlisted at the outbreak of the war.

By the close of 1916, the necessity of more radical action to make good the losses from submarines was recognized. Great Britain had built nearly 2,000,000 tons of merchant vessels in 1913. In 1916 the construction was less than 600,000 tons. A Controller of Shipping was created and active measures were undertaken to increase output from shipyards. A great number of skilled workmen was brought from the army, the navy, munition factories, and even from the naval shipyards, to undertake the work on merchant vessels. Vessels were purchased in the United States and Canada up to the limit of the supply. By these various means the additions to the

British merchant fleet in 1917 were nearly as great as in 1913, before the outbreak of the war.

COMPLETE CONTROL ESTABLISHED

The shortage of shipping during the summer of 1917 was so serious that supplies of raw cotton and of wool for Great Britain's textile industry ran low. It was necessary to adopt a rationing scheme. Under the direction of a Board of Control, on which the principal manufacturers, labor unions and merchants were represented, cotton spinners were required in September, 1917, to operate only 60 per cent of their spindles. In the woolen industry the same end was reached by an order reducing the working hours of employees by 20 per cent or from 55 hours a week to 45.

The great profits of the shipbuilding and shipowning concerns were the cause of frequent protest to the government, it being contended that these high profits were closely related to the high cost of living. Year by year, however, the number of vessels requisitioned by the government or put on "Blue Book" rates and set to work on specified trade increased. In 1917 the Controller of Shipping established complete control over the Merchant Marine by requiring all ships to be operated under direction of a general committee, on which their owners are represented. All profits above those arising from "Blue Book" rates revert to the government. This control did not include, however, the 4,000 to 5,000 small coasting vessels, as there appeared to be no need there for the state to interfere with individual enterprise.

WHY AN AMERICAN MERCHANT MARINE?

The Democratic party in the United States has by tradition and record opposed government interference with industry, and particularly government aid to the American merchant marine by subsidies. The conditions which developed soon after the war began, however, demonstrated the importance to the United States in time of war—even though in the war it were a neutral—of a merchant marine under its own flag.

The cotton growers of the South, the wheat raisers of the West and the manufacturers of the East, all were eager to send their products abroad to take advantage of the urgent demand and high prices. No one knew how long the German raiders might continue their depredations and it was felt that transport by British ships on the high seas might at any time be cut off.

It was a former Democratic President who made famous the phrase that "a condition and not a theory confronts us." The Democratic administration, regardless of the traditional attitude of the party on this question, recognized the evident need and enacted a law in September, 1916, providing a fund of \$50,000,000 (which seemed then a very large sum) to be expended in the construction and purchase of merchant vessels to sail under the American flag.

It was very soon found, however, that the operation of economic laws was building up the American merchant marine even more rapidly than the law enacted by Congress. In 1913 competition in ocean transport was so severe that only by very capable business management could a tramp freighter be made to earn a profit for her owners. In 1916 any greenhorn could run a shipping business and make fabulous profits. When Congress passed the bill fixing new standards for the rights of seamen and their basis of compensation, the consensus of opinion among American vessel owners was that the resulting handicap would be too great to permit them to compete with the ships of other nations—at least until the seamen made good their declared intention of forcing the passage of similar laws in other countries. In a few months the enormous increase in ocean freight rates made the handicap of the seamen's law a matter of trifling importance.

When a ship could earn freight money enough in a single voyage to pay her cost, there was no lack of Americans to engage in the shipping business, and there was no better flag than that of the United States to do business under. The only limit to the rate of expansion of the merchant marine

was the ability to buy or build ships. Shipbuilding in the United States has been an industry of small and uncertain profits. The established shipyards were largely filled with naval work, for the threatening conditions in Europe started a program of naval expansion in the United States.

THE SHIPBUILDING CAMPAIGN

Matters were in this condition when Germany began her wholesale campaign of destruction by submarines at the opening of 1917, followed shortly afterward by the entry of the United States into the war. It was at once apparent that an enormous expansion of ship production was the first essential to win the war. Unless ships enough were available to carry men and munitions and food from the United States to the battle front and to carry supplies to her allies as well, the great potential power of America could be only partially exerted.

It was obviously hopeless to rely on private enterprise to undertake the work. The building of emergency shipyards to build emergency ships, in a race against time and German submarines, was a task that only the government could finance. The manner in which the task was undertaken is particularly instructive. It was well realized that for the government to undertake this work directly, creating its own organization and hiring its own workmen, would be far too slow. It was realized, too, that if the general administration of the work were placed in the hands of a government bureau, subject to existing laws, precedents and customs, the desired speed might not be obtained. Instead, the Shipping Board under the authority granted it by Congress, incorporated the Emergency Fleet Corporation, a body which, while it is conducted entirely by government officials, can operate under laws made for the conduct of private business corporations and can escape thereby much of the red tape requirements which ordinarily hamper government action.

This corporation has used the vast appropriations turned over to it by Congress, not in building ships by its own organ-

ization, but in hiring ships built by a great variety of concerns. To many of these the Emergency Fleet Corporation has advanced the money, or a large portion of it, required to build and equip the shipbuilding plants, and it pays all the cost of the yards and of the ships built, plus a certain percentage for compensation to the concern which organizes and conducts the work.

Under the great extension of government control over industry, which has taken place in the United States during the past year, the government, through its various agencies, allots to these shipbuilding plants the coal and oil and steel and other metals necessary; it provides for the transportation of these materials; it collects workmen through its employment agencies; it stimulates their patriotic interest in their work; it adjusts labor difficulties; it provides homes for the workers; it furnishes armed guards for protection; it closes saloons around the plant to prevent loss of working energy through drink.

COST PLUS A PERCENTAGE CONTRACTS

Severe criticism has been made because the government is building many of these ships on cost plus a percentage contracts instead of doing the work itself or paying the contractor a lump sum for a ship. The sufficient answer to these criticisms is that the enormous expansion of the shipbuilding industry within the required time could have been secured in no other way. As far as the lump sum contracts on the huge new shipbuilding plants are concerned, the risks involved are so great that even though the government could have secured lump sum bids, they would have averaged a higher cost, if from responsible contractors, than the cost under the percentage plan. Besides, no private financiers would have backed so huge an enterprise as the government shipbuilding program and carried the financial risk. The government alone had the power to carry the risk of war, and this work of shipbuilding was as truly a war work as the charge of tanks against German machine gun nests, or the

battering of the forts around Metz by General Pershing's cannon.

With equal certainty may it be said that had the Emergency Fleet Corporation attempted to create itself an organization vast enough to do the work required within the brief limit of time, failure would have been certain from the start. Instead, a hundred or more groups of business men with established reputations for financial and executive ability were given the task of producing the ships, while the government furnished the necessary funds.

HIGH PRICES TO SAVE TIME

It may be said that the government paid a high price to these men for the service they required; but no price is too high to pay in war if it furnishes the means to victory. The organizing ability of the men who formed these shipbuilding companies was as necessary to the work as the skill of the workmen or the money raised from the tax payers.

There is no doubt that the conduct of the work has been very far from perfect. High efficiency can not possibly be secured where work is done under high pressure, with insufficient time for planning, and the shipbuilding work had to be done that way.

There has been great criticism because of the high prices paid for land, labor and materials in many cases. It would be strange indeed if the men in charge of the work had been as economical in expenditure as if the money had been coming out of their pockets. This is, of course, one of the inevitable objections to the conduct of contract work on the percentage plan. The answer to this again is that if money had not been spent lavishly, the desired speed could not have been obtained. Wages had to be set high enough to attract and hold men, who had to work under most unfavorable conditions. Material had to be bought where it could be most quickly obtained. There was no time to shop around for lower prices.

In studying government control of industry under war

conditions, as exemplified in this industry, as well as in numerous others, it is well to bear in mind a remark made to the writer by a famous general officer, who has been very near the top in a government organization which has been foremost in marshaling the industrial forces of the nation: "You can't run a *war* economically."

BUILDING SHIPS TO WIN THE WAR

It is probably hardly realized by the American people even now how essential the shipbuilding program was to the winning of the war. Investigators after the war will very likely uncover enormous waste, many mistakes, gross inefficiency and probably a considerable amount of profiteering and direct or indirect graft. So far as these were wilful, they should not be condoned, for these acts endangered the nation; but a great part of the failure and defects in the shipping program was due to the attempt to accomplish an enormous task in the face of tremendous difficulties. Those who did their best at this task are not to be blamed although they fell short of the full accomplishment that was planned at the outset.

When the shipbuilding program was laid down, the Allies' cause was in extreme danger. Those best informed knew that the rate at which the sinkings by German submarines were going on was reducing the merchant marine so fast as to endanger the food and munition supply of the Allies, and seemed to make well-nigh impossible the transport and supply of the huge armies which the United States was planning to send to the Allies' aid.

The only possible way in which success could be attained was for the United States, which had never had a large shipbuilding industry, to build ships in enormous numbers. That meant shipyard building first of all on an unprecedented scale, and then the provision of shops, tools, schools for the instruction of workmen, cities around these new yards and the entire outfit of machinery and supplies required by these vessels, from boilers to compasses.

WHY THE SHIPBUILDING PROGRAM WAS ADVERTISED

It was necessary to lay down this program and give it wide publicity for its effect on the *morale* of both our friends and our enemies in Europe, and to carry out as much of it as was humanly possible. The rate of speed in ship production which had been laid down was not attained. Perhaps those who laid it down realized there was small chance that it would be reached; but its announcement and the wide publicity given to the stupendous plans had great value in their effect on public opinion here and abroad.

Fortunately the unexpected success of the anti-submarine warfare, and particularly the success of the convoy plan of sending ships across the Atlantic, made the submarine losses much less in the later months of the war, and made up largely for the extent to which ship production of the Emergency Fleet Corporation fell behind its program.

It was a close call, nevertheless. When the armistice came, shipping was so deficient that the government would have shortly been obliged to stop the sending of troops overseas, for lack of ships to keep them supplied.

Finally, giving all credit to the many able men who labored patriotically for the success of the government's work in shipbuilding and operation, and with entire certainty that under the war conditions the task could not possibly have been accomplished in any other way, it must be said that the government's work in shipbuilding and operation during the war does not demonstrate that it can continue such operation to advantage when the competitive conditions of peace are restored. Undoubtedly certain notable advances in shipbuilding and operation were brought about under the stress of war conditions. Probably a much larger measure of government control and regulation will prevail in connection with shipping and all other matters of trade and commerce in the future; but when the world's supply is again in normal relation to its business, and competition reduces rates to old levels, the task of operating ships at a profit will call for qualities that the government organization has not exhibited.

CHAPTER VIII

Labor

Nowhere, perhaps, has government interference with industry during the war been more severely criticised than in its action for the control of labor. The criticism comes, it must be said, chiefly from the business interests; and the charge is that the concessions to labor in wages and working conditions during the war have "spoiled" labor,—put "foolish notions" into the heads of wage workers, which are very hard to eradicate; laid the foundation for the epidemic of strikes that has followed the war; sowed the seed for socialism and anarchism and Bolshevism.

To many, of course, such criticisms will appear absurd on their face; yet such ideas are widespread. It is worth while, therefore, to state just what the government did in the control of labor.

LABOR POLICY NOT PLANNED IN ADVANCE

In the first place, it is important to note that neither in the United States nor in Great Britain did the government formulate in advance a clear, definite policy with respect to the control of labor during the war. As in many other fields of government control, no action was taken until urgent necessity compelled it. No statesman in either country *wanted* to interfere with labor; and when interference became necessary it went no further than the needs of the hour demanded.

In a previous chapter it has been made clear that complete organization of all the productive forces of the nation was essential to winning the war; and the most important of all these forces is labor.

CONSCRIPTION

There were not a few who declared that the government should proceed to conscript labor of every sort as it conscripted

men for military service. Those who held such notions, however, merely betrayed their crude ideas of what government really is at the present day. Fortunately, the responsible men in charge of public affairs in both Great Britain and the United States knew well that government can only speak and act as it expresses public sentiment. It can, indeed, *lead* public sentiment, but it can go far in advance only at great peril, as events since the armistice conclusively prove.

GOVERNMENT CONTROL NECESSARILY INDIRECT

Government control of labor in the war, therefore, had to be an indirect control; it had to be exercised as and when necessity demanded; and public sentiment would not have permitted it to advance much farther or faster. Nevertheless, nothing that the heads of the nations have done in connection with the control of industry has contributed more to the winning of the war than the successful control of labor.

The famous Clayton Act makes it the law of the land that labor is not a commodity. It was easy to write that law upon the statute books; but the laws of economics, under which we all live and which are beyond our power to repeal, decree that so long as labor is bought and sold, its buying and selling is governed by the same economic laws as the buying and selling of commodities. It is also true, however—and the laws of economics do not at all infringe this—that the vast multitude of men and women who sell their labor in the market make the public sentiment by virtue of which governments stand or fall. They must be fairly satisfied with the terms of labor's sale or the government itself is imperiled.

The problem of President Wilson and of Lloyd George and of the hundred thousand officials under each who dealt directly with these problems was, how to control the buying and selling of labor as a commodity so that all operations of industry would go on unchecked and at the same time so that the rank and file of the labor army would loyally support the government.

Because the government refrained from interference until

necessity compelled, it followed that the first movement toward the control of labor was to aid in the settlement of strikes. The next step obviously was to provide machinery to settle difficulties between employers and labor before a strike was declared. The third was to create such conditions as would keep smooth the relations between capital and labor and avoid the difficulties that might lead to strikes.

Each of these steps was necessary, was generally approved by public sentiment when it was taken, and no one knows to-day what serious disaster might have befallen the nation had not these steps been taken.

THE LAW OF SUPPLY AND DEMAND

Those who criticise government interference in control of labor, and who glibly say that employers and workers should have been left to settle their differences by themselves, have no comprehension of the serious dangers that threatened us time after time during the war. Those who glibly say that wages should have been left for the law of supply and demand to settle are ignorant of how completely the law of supply and demand broke down as a means of fixing wages, as well as prices of other commodities.

Under the conditions of peaceful industry, under which nearly all the civilized world has lived for nearly half a century until four years ago, there is always a certain surplus in the world's markets—a surplus of raw materials, of transportation, of factories and stores and a surplus likewise of labor. The war transformed this condition into one where there was a scarcity of all these elements. There was not enough sugar and steel and coal and wheat; there were not enough transportation facilities by land or sea; there was not nearly enough labor.

It could not well be otherwise. All the man power of the world's great industrial nations that could possibly be spared had been turned aside from constructive work and set at the task of destruction. Not only were a hundred millions or so of the world's most active workers withdrawn from the ranks

of peaceful industry and set to building and using engines of destruction; but the world's usual daily necessities of food, clothing and shelter had still to be supplied as before, even though on a less liberal scale.

The result of this condition was, first, a rapid and unprecedented rise in the wage scale. This was justified, not alone by the economic law of supply and demand, but by the simultaneous rise in the cost of living, which compelled an increase in wages to give the workers the bare means of subsistence.

When the price of other commodities rises, production is stimulated; but the rise in the price of labor does not necessarily increase the amount of labor performed. On the contrary, the higher wages and the conditions which produced the higher wages may even reduce the amount of work done, as has actually happened in certain special fields.

To those who urge that the government should have left capital and labor alone to settle all these matters between them, it may be answered that that very thing was done in both Great Britain and the United States until it was evident that the government must step in to avert national disaster.

The present opinion is that government interference during the war resulted in undue favors to labor. The fact is that government interference was all that prevented an increase in the wage rate and a reduction in output that would have meant the gravest national peril.

The government itself was by far the greatest employer of labor. In the building of camps and barracks and hospitals and munition plants, in the production of ordnance and army supplies, in the building of shipyards and ships and aeroplanes, the government paid in most cases the entire cost of the labor employed. Those who conducted these industries were bidding for labor in competition with each other and in competition also with the employers of labor on farms and railways and in mines and factories.

There is no doubt whatever that hundreds of millions of dollars were wasted in paying labor exorbitant wages, often

for very little work produced. In the dark days of 1917 and 1918 it was a grave question whether the nation's financial strength would last to win the war. Exorbitant wages to millions of workers were a peril from this point of view. The falling off in production that accompanies high wages was another grave peril. A third and hardly less serious peril was the rapid rise in the price of all commodities, part of which rise was due to the increase in the cost of the labor used in their production. This rise in prices was a most fruitful source of dissatisfaction to all classes.

HOW GOVERNMENT CONTROL OPERATED

The government's war labor control was exercised through a great number of separate bureaus, generally independent of each other, each carried on according to the ideas of those in charge. The general aim, of course, was to increase the output of labor and keep down the cost while stimulating in every possible way the *morale* and patriotism of the workers; but the details of plans and policies were made by each chief for himself.

When the very first step toward organizing the nation for war was taken in the creation of the Council of National Defense, Mr. Samuel Gompers, head of the American Federation of Labor, was made chairman of the Council's Committee on Labor. This was merely a wise tactical move to bring labor in as a recognized partner in the great enterprise of prosecuting the war.

As real organizations for war industries succeeded the Council of National Defense, it was found necessary in each organization to establish a separate department to have charge of labor problems. This was true of the railways, of shipping, of ordnance production, of work in the food control and fuel control fields. General supervision over labor control was gradually developed in the Department of Labor. That department secured the service of some of the ablest economists in the country, who assisted in working out its plans and policies.

THE NATIONAL WAR LABOR BOARD

Perhaps the most notable organization under this department was the National War Labor Board, of which Ex-President Taft and Frank P. Walsh were chairmen. This board was created by the War Labor Conference, a body made up of five representatives of labor and five of employers, which was invited by Secretary of Labor Wilson, on January 28, 1918, to work out a plan for the settlement of strikes during the war. The War Labor Board and the plan under which it operated were devised by this conference after sessions lasting several weeks. The board was called in to settle labor controversies where all other means of adjustment had failed, and its decisions were almost without exception accepted as final by both parties to the controversy.

UNITED STATES EMPLOYMENT SERVICE

The business of finding jobs for men and men for jobs is most inefficiently conducted under private enterprise. War conditions made a bad matter worse. Private employment agents were a great factor in increasing the labor turnover. Employes who were eagerly grasping every possible means of increasing their working force paid large bonuses for obtaining men; the employment agents would stimulate dissatisfaction and labor difficulties at a plant in order to get the men for another plant.

The Department of Labor established the United States Employment Service, which opened more than 700 employment offices in all parts of the country. A separate branch known as the Public Service Reserve dealt with technical and professional experts; another branch organized boys for work on farms.

The Division of Conciliation, Labor Adjustment Service, which was organized prior to the War Labor Board, settled 322 industrial disputes affecting nearly a million workers, in the last six months of 1917.

Other important war bureaus in the Department of Labor dealt with women in industry, working conditions, industrial

housing and transportation and information and education. The job of the last named bureau was to develop a sound public sentiment among employers and workers concerning the issues of the war. For example, speakers were sent into plants working on war industries and posters were placed in them to stimulate a sentiment among the employes that would favor industry and condemn slacking.

It would be difficult indeed to appraise the work of each and every separate bureau of the government which had to do with labor control during the war, and determine the value of its contribution. Here, as everywhere else, the work of organization had to be done under great pressure and such men were used as were available. There was no time to carefully build up by the process of trial and error an efficient organization, and the results varied greatly, of course, according to the fitness of the men who happened to be placed in charge.

In judging the results obtained by government control of labor, therefore, attention must be given to the broad general result, and not to the detail of some little corner, where the critic may have discovered an instance of gross inefficiency; and judging by these broad results, it must be agreed that government control of labor was one of the most powerful and necessary factors in winning the war.

TESTIMONY FROM A BUSINESS LEADER

As stated at the outset, however, there is a large body of business men who condemn the work of the government in connection with labor, and who have evidently forgotten the conditions which developed during 1917, the first year of our war activity, and which created an overwhelming public sentiment that compelled the government to take action.

A vivid picture of this condition is given in a statement by Mr. James A. Emery, of the National Industrial Conference Board, an organization of large employers of labor, to which was largely due the establishment of the War Labor Board.

Mr. Emery's statement, made in April, 1918, was in part as follows:

The need for devising an effective means of preventing the continuously increasing interruption of our war production has become steadily greater. So far as it has and is being caused by agents of the public enemy, it has been and will be the subject of increasingly drastic legislation and police administration; but so far as it has been due to economic differences, intensified by circumstances of war production, agitation and suspicious discontent, it is but partially and ineffectually met by existing agencies or the experimental policies of the government.

Soon after the declaration of war, labor dispute adjustment machinery was created by agreement between the Secretary of War and Mr. Gompers in relation to cantonment construction, by the Shipping Board, and the international officers of the craft unions involved, while the Department of Labor and various temporary committees and commissions, including the President's Mediation Commission, undertook the investigation, mediation or arbitration of general classes of employment controversies. Despite these various agencies, none of which were coextensive with the field of industrial production, from our entrance into the war, strikes steadily increased in number, extent and intensity.

An investigation of strikes between April 6 and October 6, 1917, made by the National Industrial Conference Board, showed during that period a verified loss of 6,285,519 production days. The Bureau of Labor Statistics, Department of Labor, in its December, 1917, bulletin reported for the preceding month of September, 171 strikes involving 147,349 persons, whose average loss of time indicated a minimum labor loss of more than a million work days.

The same bulletin, reporting from official statistics of the German Empire, indicated that the United States lost through strikes in the single month of September, 1917, more work days than the German Empire from the same cause in the whole year 1916.

Whether we prefer the conclusions of a private body predicated upon painstaking inquiry or the comparisons afforded by official figures, either indicates an actual and threatened loss of production through labor disputes, with their social reaction upon national unity of thought and action, constituting a tragic menace. Whatever the motive of those who stop, or threaten to stop, the production of ships or supplies for ourselves or our allies, they consciously or unconsciously perform the work of the public enemy.

Great Britain met this condition by the famous Treasury agreement of March, 1915, between the government and the representatives of all the British trade unions. The unionists were asked to abandon every restrictive shop practice or custom threatening the maximum output of munitions, to agree that there should be no strikes affecting such production, and that a dilution of unskilled, female and unorganized labor be accepted, with a compulsory arbitration of all differences. In return for this the government assured a limitation of employers' profits and the restoration, without prejudice to the unions, of the customs and practices which they abandoned for the period of the war. In other words, highly organized Great Britain became an open shop to win the war, for organized British labor accepted the proposal and has kept its pledge with magnificent loyalty.

American labor conditions as we entered the war were substantially those which

Great Britain reached by agreement. There from 80 per cent to 90 per cent of the war industries, including shipbuilding, were highly unionized. Here the reverse was the fact. The Naval Consulting Board, which examined and classified plants available for munition production, reported, prior to our entrance into the war, 18,654 establishments, of which 1,867, or slightly more than 10 per cent, were union shops. We therefore possessed, as a matter of fact and law, upon entering the war, a condition which Great Britain sought and established as a national policy through negotiation and after learning its necessity by costly experience.

As evidence that Mr. Emery did not overstate the condition as to stoppage of production by strikes during 1917, another quotation may be made: At the annual meeting of the National Civic Federation early in 1918, a British labor union leader who was present said that if Great Britain had suffered from strikes as severely as did the United States during 1917, she would already have lost the war.

It was this condition which brought about the establishment of the War Labor Board and the great development of the Department of Labor already reviewed.

To what extent the experience in government control of labor during the war is applicable to peace time conditions, is another story. There is no doubt that the war exigency made it possible for the government to secure concessions from the leaders of both the employers and the labor unions that would not have been granted otherwise. There is no doubt, either, that the reaction from government regulation has helped to create the widespread belief that the government should no longer interfere between capital and labor. On the other hand, there is a growing appreciation of the extent to which the public suffers by industrial strife and a growing belief that some government body should act to protect the public interest. The great epidemic of strikes in the year 1919 has created a new demand that government regulation of labor shall be established on a permanent basis.

CHAPTER IX

Capital

Government regulation of labor was necessary to win the war, notwithstanding the right of the worker to sell his labor where he pleased, or not to work at all. Government regulation of capital for the war emergency was exercised notwithstanding the right of the owner of property to do what he pleased with his own.

Great Britain, where the burdens of war pressed far more closely than in the United States, early recognized the necessity of conserving capital by every means possible. The government needed not only all the money it could raise by taxation, on a scale never before known, but all it could borrow. To obtain the necessary funds, it had to embark on a great campaign to encourage thrift, so that those of small means would have money to loan to the government. It had also to see to it that capital, so urgently needed, not only for loans to the government but to maintain the war industries, was not diverted to nonessential enterprises. During the war British cities were not allowed to undertake improvements in drainage, paving, water supply or other public utilities, or to expend any money except for necessary operations and maintenance. The private property owner could not erect a building or even make extensive repairs without demonstrating the necessity to a public authority. No enterprise could obtain capital unless its prosecution was necessary to the war.

These restrictions were not difficult to enforce. Public opinion recognized their wisdom and any individual who, for his own pleasure or profit, desired to transgress them knew that his just punishment would be the condemnation of his neighbors and friends.

While the United States was at no time under any such

pressure as England, systematic control of capital to prevent its diversion from war purposes became nearly as complete here as the war progressed and the government organization became effective.

The Capital Issues Committee had authority over all issues of stocks and bonds; and restricted all issues of new securities by city authorities to necessary requirements.

It was the War Industries Board, however, which was most effectual in controlling expenditure so that the least possible amount should be devoted to luxuries and nonessential industries. This board, established by President Wilson on March 4, 1918, with Bernard M. Baruch at its head, was rapidly built up to an organization which controlled the entire productive activity of the United States and directed it to the one object of winning the war. The board controlled the buying and selling, the allocation of raw materials and labor and the facilities of transportation by land and sea.

An excellent illustration of its operation was given when in September, 1918, Senator Calder of New York introduced a resolution in the Senate calling on the board for information as to why the board had "promulgated orders which would completely destroy the building industry of the country." In reply Chairman Baruch stated that the war needs of the United States and its allies would call for 21,000,000 tons of iron and steel during the last six months of 1918. The output of iron and steel by the United States during the first six months of 1918 was less than 17,000,000 tons. The production of building materials normally consumes about 30,000,000 tons of fuel annually. Their transportation amounts to 25 per cent of the total tonnage moved by rail. In order to conserve the iron and steel, the fuel, the transportation and the labor urgently needed for war necessities, the production and transportation of building material was restricted by the War Industries Board to that required for war building purposes.

Against the action of the government in its control of capital there was little protest and there has been little criticism since hostilities ceased. The same thing is true in England.

Every thinking man knows now that the "business as usual" slogan, with which England began the war, and which had its day in the United States, would have meant national defeat and disaster. Every thinking man knew when the war reached its crucial stage that the nonessential industries and the war industries could not both be carried on; and that government action to prevent diversion of capital, labor and materials to nonessential industries was a necessity.

CHAPTER X

Food

A narrow view of the subjects discussed in this book—government control of industry—might possibly exclude the two great bureaus which exercised control over food and over fuel, as having to do with the control of consumption. On the other hand, it was through these two bureaus that control was exercised, not alone over consumption but over the vast industry of producing and manufacturing every form of food products and over the other vast industry of producing and distributing every form of fuel.

Government control over food was like its control over labor in one important respect. It had to be exercised in an indirect way for the most part, and it had to be limited to what public opinion would approve. Even more than in the control of labor, the control of food production and use had to depend on the education of popular sentiment.

The food bureau had to deal with hundreds of thousands of producers and millions of consumers, where the War Industries Board, in dealing with the production of copper, for example, could control the whole situation by contact with a dozen great corporations. Of necessity, the food bureau in its work had to interfere with the daily life and fixed habits of all the people. In doing this, however, it had the great advantage that the absolute necessity of its work was all but universally recognized. Every man, woman and child knew that in Europe the issue of the war depended as much on which side could make its food supplies hold out longest as on which side had the greatest military strength.

The policies and practices of the Food Administration and the extent to which it had established new precedents in economics were admirably set forth by Herbert Hoover in an address before the Pittsburgh Press Club, April 18, 1920.

He explained first that the necessity for America's conserving food to supply the Allies arose from the scarcity of ships. There was food enough for Europe in South America and Australia, but to carry 5,000 tons of food per month to the Allies would require 15,000 tons of shipping if brought from Australia, 10,000 tons if brought from Argentina and 5,000 tons if brought from North America. In order that ships should be available to carry the American army to France it was necessary that America, rather than the more distant continents, should supply the bulk of the Allies' food requirements.

The United States normally produces a small surplus of food for export. In order that she should be able to honor the draft of her allies three possibilities were open: She could slightly increase the flow to them by a partial embargo on food shipped to neutral countries; she could increase production by expanding the area planted; and she could reduce consumption by cutting out the 15 to 20 per cent used in excess of what is necessary to maintain public health. All these three plans were put into effect so far as possible.

WHY RATIONING WAS NOT ADOPTED

In the other countries at war, a system of food rationing was early established and was enforced more or less rigidly as urgency required. In the United States Food Administration, Mr. Hoover, in the address above referred to gave reasons for rejecting rationing as follows:

Fifty per cent of the population are either producers or live in intimate contact with the producer, and, therefore, cannot be restrained in their consumption by any rationing. The consumption of the very poor is not beyond the necessities of health and strength.

Our industrial population varies greatly in its habit of consumption of any given commodity in different parts of the country. For instance, the Southern worker consumes perhaps not more than 2 pounds of wheat products per week per capita, whereas in some parts of the North he consumes 8 pounds. Rationing of wheat on any broad national lines would increase the consumption beyond necessity in the South and decrease it in the North below necessity.

Furthermore, to adopt rationing as a positive system would cost the government \$10,000,000 or \$15,000,000 annually for bureaucratic expense, as we should have to place tickets and coupons with every householder and behind these tickets would have to be erected a vast administrative organization.

ARGUMENT AGAINST HIGH PRICES

There were strong arguments by theoretical economists that the Food Administration should rather favor high prices than low, because that would operate to check consumption. Mr. Hoover answered this proposal as follows:

Reduction of consumption to the extent that we require by an increasing price is simply to place certain commodities out of reach of those classes of the community who have not the purchasing power. This whole conception is simply conservation for the rich and against the poor. The adoption of this principle of rising prices would simply mean that the poorer sections of our community would pay in suffering and the better-to-do classes would pay many score times the cost of any other system of reduction.

Furthermore, if we are to increase the price of our foodstuffs merely to decrease their consumption, we must enter a vicious circle of constant readjustment of wages, for our working people must live.

Beyond this, again, we could no doubt reduce the consumption, for instance, of sugar by 20 per cent, if we doubled the price; but to double the price of sugar alone means an annual drain on our population of \$600,000,000 and this \$600,000,000 would go into the hands of a vast number of middlemen. This would give rise at once to profiteering and discontent and would lay the foundation for social revolt.

VOLUNTARY CONSERVATION

The plan adopted by the Food Administration was to call for voluntary food saving. A nationwide campaign of popular education was undertaken to bring home to the head of every household and every individual that economy in the use of food was a patriotic duty. Concerning this, Mr. Hoover said:

I do not believe there is another nation in the world in which the proportion of individuals of a willing sense of sacrifice is so high as in the United States, and in which a sufficient voluntary reduction in the use of food could be obtained.

This basis of reduction gave some trepidation to the Allies for fear of our failure; but I am happy to say that the Allies will all have been fed during this harvest year so far as the obligation falls upon us, almost wholly on a voluntary basis.

It would be difficult to justly appraise the results of the food survey campaign and its effect on the individual consumer and the private family. There is no doubt that the savings made by certain classes were offset by the increased consumption of others. Millions who received far higher wages than ever before and were more continually employed

naturally bought food more liberally. The consumption of beef products in the United States, for example, increased 10 per cent in 1917. The Food Administration, however, was not in full operation till near the close of that year.

Where the food saving campaign had very great results was with the larger users of food—hotels, restaurants, hospitals, army camps. The saving effected in such places was enormous.

Thus, partly by outright saving, partly by substitution, partly by increased production, the necessary food was obtained. The United States has ordinarily only about 20,000,000 bushels of wheat over its home consumption available for export. In 1918 the Food Administration originally planned to spare 100,000,000 bushels of wheat to Europe. The scarcity of ships to bring wheat from Australia and Argentina made it necessary to increase the contribution to 160,000,000 bushels, and the Food Administration did it.

WORLD FOOD STATISTICS

Under peace conditions the figures for world food production and consumption are collected and studied by the dealers who buy and sell on the central exchanges and are used, of course, for their own profit. The Food Administration, in cooperation with the food control bureaus of the Allies, brought together these statistics as a guide to the economical collection and distribution of the world's food, and also as a guide in fixing prices. This in itself was an epoch making event.

HOW PRICE FIXING BECAME COMPULSORY

The policy of the Food Administration from the start was against rigid price fixing. The difficulties experienced in European countries with price fixing were well known. In a public statement on February 25, 1918, Mr. Hoover said:

I wish to say at once and emphatically that the Food Administration is not a price fixing body, except with regard to certain commodities which today are dominated by wholly abnormal overseas commercial relations.

And yet by the logic of events, the Food Administration was compelled to fix prices. It had to use its knowledge of world

supply and world consumption to adjust prices so that production would be stimulated without bearing too hard on the consumer of small means. How the price fixing was forced on the Food Administration was told briefly and forcibly by Mr. Hoover himself:

It was found by experience to be absolutely impossible to trust to the normal commercial agencies to select the prime commodities necessary for national existence among the Allies and to trust to the incidental operations of trade to maintain the maximum handling of shipping. Furthermore, these commodities are distributed by their governments under rationing systems, and thus must, in any event, come into government hands.

Therefore, the European governments have been compelled to undertake, as the consequence of shortage of supplies, the single-handed purchase of their supplies both for civil and military purposes. There has thus grown up an enormous consolidation of buying of 120,000,000 European people, a phenomenon never before witnessed in the economic history of the world.

Furthermore, we have aggregated in this country something like 2,000,000 men under arms, and we shall probably expand our forces to 3,000,000 or 5,000,000 before we are finished. The buying for these men is necessarily concentrated in one agency and we have thus a second great engine growing up in our midst as a necessity of war conditions.

In order that these two buying agencies should not get in each other's way, it has been necessary to place them under joint direction. In the final outcome, therefore, we find ourselves in the presence of a gigantic monopoly of buying just as potent for good or evil as any monopoly in selling, and in many instances either making or influencing prices. Therefore, not through any theory, but through an actual physical fact, the price made by this gigantic buyer dominates the market.

This is price fixing in a light never contemplated in economic history or theory, and it is time that economic thinkers denuded themselves of their procrustean formulas of supply and demand and took cognizance of it.

In commodities where this situation arises, the government must necessarily stabilize the price, and all theories to the contrary go by the board.

It is entirely possible for the government to make these purchases to the best advantage of the Allies and to the army and navy and to disregard totally the civilian population, either the consumer or the producer. Where these purchases aggregate such a volume as to make inroads on the normal consumption of the civilian, it would mean that the residue would go to the highest bidder.

This would be conservation again—for the rich and not for the poor—with a vengeance. Had we allowed this to go on in wheat, flour would today be \$40 a barrel, instead of at a universal price of \$12.

The producer is also subject to damage by these great buying agencies. Production of food does not take place evenly over the year; it is seasonal. It is entirely possible for such a purchasing monopoly to force down prices in the season of surplus marketing below the producers' cost.

Again, transportation both inland and overseas is subject to every vicissitude of war. Temporary stoppages in transport can produce every speculative disaster

unless some stability is given to markets. Therefore, both sides, consumer and producer, must be safeguarded by wise direction of this buying power, and this is bound to result in price regulation for certain commodities, in just protection to both.

Because the Food Administration fixed prices through its power over the markets and not by the method of arbitrary public order, with penalties for infraction, there has been general failure to appreciate the extent to which price control was effected by the Food Administration.

HOW MUCH FOOD WAS SENT ABROAD?

In a bulletin issued September 19, 1918, at a time when the continuance of the war for at least another year was fully expected, the Food Administration issued a bulletin summarizing the food it had sent to the Allies in the year ending July 1, 1918, and what it proposed to do during the succeeding year in furnishing food to the Allied civilians and armies, the American Army, and certain neutrals dependent for food on the United States, as follows:

	Average 3-year prewar shipments	Shipped year ending July 1, 1918	Must ship year ending July 1, 1919	Increase this year over last year
	Tons	Tons	Tons	Tons
Meats and Fats (Beef, Pork, Dairy, Poultry and Vegetable Oil Products).....	645,000	1,550,000	2,600,000	1,050,000
Bread Stuffs (Wheat and substitutes in terms of grain)	3,320,000	6,800,000	10,400,000	3,600,000
Sugar (From United States and West Indies).....	618,000	1,520,000	1,850,000	330,000
Feed Grains (Mostly Army Oats) ..	950,000	1,950,000	2,700,000	750,000
Totals.....	5,533,000	11,820,000	17,550,000	5,730,000

THE EFFECT ON PRICES

If prices had been left to the free operation of the law of supply and demand, this great increase in purchases of food for foreign shipment would have very greatly increased food prices to the American consumer. It is of great interest, therefore, to see what actually happened.

The following table was made public by the United States

THE NATION'S FOOD BILL DURING A YEAR OF WAR

	2d Quarter, 1917		3d Quarter, 1917	
	Total cost in dollars	Cost per capita	Total cost in dollars	Cost per capita
Breadstuffs.....	\$314,906,915	\$3.0383	\$393,732,314	\$3.7844
Vegetables.....	330,709,747	3.1905	152,884,830	1.4694
Sugar.....	200,674,663	1.9363	205,527,930	1.9754
Fruits.....	78,361,156	.7559	71,290,290	.6852
Oils and Nuts.....	52,302,765	.5046	58,304,496	.5604
Fish.....	26,140,445	.2522	26,326,613	.2530
Meats.....	764,882,651	7.3804	777,233,981	7.4705
Poultry and Eggs.....	221,956,895	2.1417	226,038,723	2.1726
Dairy Products.....	573,665,667	5.5354	584,068,678	5.6138
Totals.....	\$2,563,600,904	\$24.7353	\$2,495,407,855	\$23.9847

	4th Quarter, 1917		1st Quarter, 1918	
	Total cost in dollars	Cost per capita	Total cost in dollars	Cost per capita
Breadstuffs.....	\$348,554,753	\$3.3372	\$351,952,618	\$3.3567
Vegetables.....	136,899,969	1.3107	143,179,060	1.3655
Sugar.....	210,439,897	2.0148	190,016,407	1.8122
Fruits.....	70,506,614	.6750	75,057,007	.7158
Oils and Nuts.....	68,495,873	.6558	72,652,456	.6929
Fish.....	33,133,947	.3172	40,631,802	.3875
Meats.....	878,708,620	8.4131	838,387,663	7.9961
Poultry and Eggs.....	266,500,892	2.5516	304,216,881	2.9014
Dairy Products.....	641,510,693	6.1421	676,389,410	6.4510
Totals.....	\$2,654,751,258	\$25.4175	\$2,692,438,304	\$25.6791

	2d Quarter, 1918		Per cent increase or decrease over 2d Quarter, 1917
	Total cost in dollars	Cost per capita	
Breadstuffs.....	\$349,626,283	\$3.3216	+ 9.3
Vegetables.....	123,903,476	1.1768	-63.1
Sugar.....	188,723,860	1.7930	- 7.4
Fruits.....	103,881,429	.9868	+30.5
Oils and Nuts.....	81,964,541	.7786	+54.3
Fish.....	24,732,401	.2349	- 6.9
Meats.....	938,789,266	8.9192	+20.8
Poultry and Eggs.....	262,577,561	2.4947	+16.5
Dairy Products.....	619,553,054	5.8863	+ 6.3
Totals.....	\$2,693,751,871	\$25.5919	+ 3.5

Food Administration on September 19, 1918. It shows the total consumption of staple foods and the cost based on the average wholesale price for each quarter. During the second quarter of 1917 (the first three months of the United States' participation in the war) the Food Administration's work had not begun. The Lever Bill, which gave it its charter of authority, was enacted August 10, 1917. Thus the table demonstrates that notwithstanding the large purchases for export, food prices rose on the average only $3\frac{1}{2}$ per cent in the year covered by the tables.

It was also stated in the same bulletin that there had been more than a $3\frac{1}{2}$ per cent increase in the prices paid the farmer, so that a reduction had been effected in the contributions which the consumer pays to the various middlemen—speculators, jobbers, etc.—between the producer and the wholesaler.

CONTROL OF MANUFACTURE AND TRADE

The Food Administration had to use the existing agencies for the production, manufacture and distribution of food. No other possible course was open. These agencies had all been engaged in business for profit and for all the profit they could make. Legally the man who produces or who buys and sells has a right to sell at the highest price he can get the purchaser to pay. The Lever Act for the first time applied to this business the rule hitherto only applied to natural monopolies such as public utilities, that prices and profits must not be "unjust, unreasonable or unfair." It further gave authority to the President (acting through the Food Administration) to fix "what is a just, reasonable, nondiscriminating and fair storage charge, commission, profit or practice."

Had the power which the Lever law placed in the hands of the Food Administration been used in an autocratic way, as it might easily have been from lack of judgment in establishing policies at the start, the whole Food Administration might have been wrecked with resultant disaster to the nation and its allies. It was not only necessary that the producers and

makers and dealers in food should be controlled, but that they should voluntarily accept such control and work effectively under it.

In an admirable summary of the work of the Food Administration by Mr. Thomas H. Dickinson, in the *North American Review* of July, 1918, the principles which were to govern the Food Administration, as laid down by President Wilson and Mr. Hoover in the spring of 1917, were as follows:

The encouragement of production through the protection of the interests of the producer; a resolute scrutiny of costs and trade practices in the great producing and distributing food trades; an insistence upon the principle in the dealing of these trades of the "reasonable profit" and no more; the segregating by requisition or otherwise of the food stocks necessary for the war purposes of America and the Allies; the utilization as far as possible of the extant machinery of the food trades without radical and unnecessary reorganization; the maintenance of the food trades in the hands of their legitimate agents; the establishment of food distribution, if necessary, upon a scientific nutritional basis; the conservation of food and the elimination of waste by the people of the United States; the centralization of responsibility and the decentralization of administration; the dependence upon volunteer cooperation by all classes, producers, distributors and consumers.

LICENSING THE FOOD TRADERS

The main instrument by which the purposes above described were carried out in the Food Trades was the system of licensing. Of it Mr. Dickinson says:

The system of licensing is to be explained as the means whereby the voluntary cooperation of the food trades of the country is moulded into the execution of the national will as revealed in the food control law and in the decrees of the Food Administration. The license system enlists the patriotic majority for the control of the recalcitrant or seditious minority. It is more a system of convenient administration than of governmental control. By means of the license system the trade is protected as well as is the government. It provides standards where standards are much needed. It relieves the anxiety of competition under unfair conditions.

The punishments provided for the violation of the license provisions are of a new and interesting order. While backed by the power to take criminal action, punishments have been as a rule of the more direct order that attacks the licensee's right to do business. Revocation of license is a much more serious punishment than a fine and much more easy of application.

It is probably true that the American public has never sufficiently appreciated the work that the Food Administration did on its trade control side. The consumer knew that he bought his food from the same men as before; he knew

that many prices rose apace, as the table above shows; and the public has a better memory of the price that rose than of the price that fell. He knew that men in the food trades were making good profits, as was inevitable when business was more active than ever before in history and the volume of trade unsurpassed. It was entirely natural to conclude that the Food Administration was letting things take their course, and that its sole activity in trade control was a rare fine or suspension of the license of some profiteer.

In other words, because the Food Administration did not openly publish fixed prices and limit profits for the whole food industry, and enforce compliance with them under severe penalties, the public failed to appreciate the extent to which its control over the miller and manufacturer and dealer was effective.

The question may be raised, of course, whether the Food Administration's control went as far as it might have gone—whether greater stringency in control might not have further reduced the profits of the trade. As to this, no one possibly can be wise enough to say; but in forming an opinion on such a question it is only fair to give heed to the difficulties and limitations of the Food Administration. Like every other government war bureau, it had to be organized in the briefest possible time with such men as were available and with no opportunity to try them out. For the most part it had to be made up of men from the trades to be controlled. An error of policy in endeavoring with such a staff to enforce too closely limitations of profits might have wrecked the whole plan for cooperation and done irreparable harm.

The best of all evidence of the success of the Food Administration's control is the course of events since its work terminated. The increased food prices that have prevailed during 1919 compelled Congress to continue the control over the sugar market. The nationwide outcry against profiteers is an unconscious testimonial to the work done by the bureau during the war under the direction and inspiration of Herbert Hoover.

CHAPTER XI

Fuel

The oft repeated economic lesson of the war, that supply and demand relations utterly fail to fix prices equitably when absolute necessity prevails, was nowhere better illustrated than in the fuel industry. Civilized man has become not merely a tool using animal but an animal who has harnessed the great powers of nature to his tools. And of these great powers, that stored in fuel is now nearly the sole reliance.

Ships to win the war lie idle when coal or oil is lacking. Guns and shells and transportation, and all the industries that supply the daily necessities of both war and peace, all come to a dead standstill when the fuel supply stops.

The rulers of Germany alone of all the great nations clearly understood at the outbreak of the war that control of fuel meant national supremacy, not only commercial supremacy in peace but military supremacy in war. Germany's invasion of Belgium was not merely because topography made an attack on France easier by that road. Germany knew that her possession of the rich coal and iron mines of Belgium and Luxemburg would give her an enormous military advantage. She added to that by invading Russia far enough to secure control of her principal coal fields.

CONTROL IN GREAT BRITAIN

It would be difficult to overestimate the enormous handicap to the Allies and advantage to Germany which resulted from Germany's capture of coal fields. Italy and France had short rations of fuel for their war industries for years. They were continually on the ragged edge of a precipice. Great Britain, with the best will in the world, failed to comprehend in the early years of the war that coal was a prime necessity to win victory.

The traditions and prejudices of the British business man,

and of that nation's intellectual leaders and statesmen, have been for a century strongly opposed to all government interference with industry. "Business as usual," was the slogan with which the Britisher began the war. He was converted by the experiences of the first disastrous year to see that government must take the lead in a vast campaign for the production of guns and shells; but he had no comprehension of the fact that coal and shipping were just as essential to win the war.

At every extension of government direction of ship operation and coal digging and distribution, a vociferous protest arose from the great influential middle class that so largely dominates public sentiment in Great Britain.

The government, headed by Mr. Asquith and later by Lloyd George, had to reckon with this prejudice—just as President Wilson had to wait until public sentiment in the United States had reached a point that would permit this country to enter the war without danger of serious civil discord. For nearly three years the Government of Great Britain temporized with the coal situation and interfered with the coal trade only when troubles arose that made interference necessary.

And these troubles came thick and fast. Coal production fell off just at the time when coal was most urgently needed. Coal prices rose apace, arousing widespread protest from both householders and industries. Coal miners demanded large increases in wages and strikes started whose continuance meant certain national disaster.

The destiny of Great Britain and of the world seldom hung on a more slender thread than when on July 20, 1915, Lloyd George's personal appeal, after all other means had been tried and failed, induced 200,000 Welsh coal miners, who had been on strike for a week, to return to work.

The "Price of Coal" Act

Looking back on the situation now, it is easy to see that measures should have been adopted from the start to prevent such dangers, but few could see it then.

It was while the nation was awakened to the dangers of the coal situation by the strike in South Wales, that Parliament took the first step toward control by passing the "Price of Coal" Act. This limited the price of coal at the mine to not more than 4 shillings advance above the price prevailing in the year ending June 30, 1914. While this protected in some measure the home consumer, it left the coal industry free to profiteer from the necessities of France and Italy and Russia. Not till a year later were arrangements made to control prices of export coal.

Those who opposed government interference with the coal industry based their opposition on the argument that private enterprise unhampered would produce more coal and would distribute it to those who needed it most and could afford to pay the higher price. At the end of two years of war the statistics of two years of coal output and export proved that a continuance of past policy meant national disaster. Here are the figures:

TOTAL PRODUCTION OF COAL BY GREAT BRITAIN

	Tons
August, 1913, to July, 1914.....	281,133,000
“ 1914, to “ 1915.....	250,368,000
“ 1915, to “ 1916.....	250,748,000
Total Exports	
1913.....	73,500,000
1914.....	59,000,000
1915.....	43,500,000

It was the showing which these statistics summarize that broke down the opposition to complete government control of the mines of South Wales. Three months later similar action was taken for all other coal mines in the United Kingdom. A Coal Controller for the United Kingdom, Mr. Guy Calthrop, was appointed and a new government department was created under his direction. This organization undertook the regulation of prices and limitation of profits in the field of both production and distribution. An agreement was reached and enforced by Act of Parliament, under which each coal mine owner was guaranteed profits at least equal to those made

during the year before the war. Additional profits up to 20 per cent excess allowed by the War Finance Act were permitted, but three-fourths of these were to go to a fund to make good losses of mines where profits fell below the standard return.

Conclusion of arrangements with the coal miners' organizations, providing for increased wages and removal of restrictions on output, were the next important work of the department. After nearly a year of negotiations and compromises, wages were agreed upon involving an advance of some \$100,000,000 annually to the mine workers. The advance in the price of coal fixed by the act of 1915 was increased in October, 1917, from 4s. to an amount varying from 6s. 6d. to 9s.

Limiting Consumption

Campaigns to reduce consumption by preventing waste were also undertaken, both to stimulate voluntary economies and to enforce saving by a system of rationing.

Everyone can now see that every bit of work done by the Fuel Control Department was necessary. With all that this department was able to do, Great Britain's output remained far below the requirements of the nation and its allies to the end of the war. The heavy drafts to fill the armies limited the man power available to operate the mines. Coal for the navy, for munition works, for railways at home and abroad, for other works of absolute necessity, had to be found. Household consumption and nonessential industries had to be cut off to supply the deficiency and nothing but the strong hand of the government could effect this.

Is Government Ownership of Coal Mines Ahead

In Great Britain, even before the war emergency, government ownership and operation of the coal mines was a live political issue. The experience of the war has brought it into still greater prominence. It is true that the war time method was control and not actual ownership and operation; the mine owners continued to operate the mines while the

government directed their methods and limited their profits. A precedent has been established, however. The public has learned that coal is king. The mine owner and the coal dealer and mine worker can reign in peace so long as their rule is beneficent; and in the past Great Britain has had its coal supply furnished at a marvellously low price. Hereafter, the workers at the mines must have higher wages, and this the public will concede; but it will not have its coal supply shut off by disputes between the workers and the employers. Government control of the coal industry in Great Britain may be for a time relaxed, but the coming of any emergency will surely see it reestablished, probably in a permanent form.

CONTROL IN THE UNITED STATES

Great Britain took control of its railways when it entered the war and delayed for two and one-half years taking control of its fuel industry. The United States Government, enlightened probably by Great Britain's experience, took control of fuel within four months after declaring war, but delayed control of the railways until it had been at war for nine months.

One thing which compelled early action in the United States was the course of coal prices. The United States has far cheaper coal than any other country in the world. During the greater part of 1916, notwithstanding the stimulus which business had received from Europe's great purchases, coal prices remained low; \$1.25 to \$1.50 per ton at the mine was the prevailing price. During the latter part of the year, however, demand outstripped production, users of coal bid against each other to secure a supply, and prices went suddenly soaring in a way that amazed coal producers as much as it did coal users. By the summer of 1917 soft coal was selling at \$7 to \$8 per ton, with every prospect of further advance. Nearly all of this price was added directly to the profit of the mine operator and the coal dealer. There had been little increase in miners' wages and none in freight charges.

The business community, which commonly is bitterly

opposed to any government interference with industry, found itself in a position where it had to pay to the coal industry such a price as the latter chose to ask. Hence, vociferous appeal for government control arose from quarters where the contrary is always expected.

Since the demand for government control arose from the above described cause, price control was the first task undertaken. Prices at the mine for soft coal produced in 28 different mining regions were fixed by Presidential proclamation on August 21, and on anthracite two days later. In the proclamation establishing prices it was revealed that the aim had been to limit excessive profits on the one hand and on the other to increase production. "The prices provisionally fixed here are based on the actual cost of production and are deemed to be not only fair but liberal as well. Under them the industry should nowhere lack stimulation."

These provisional prices were subject to appeal and 41 complaints were investigated up to the end of 1917. These affected only a small part of the total tonnage produced (about 11 per cent) and the additions in price allowed as result of the appeals added only $3\frac{1}{2}$ per cent to the total outlay for soft coal.

New prices for coal made necessary new wage rates to the coal miners. A national conference of mine owners and operators was called at Washington October 6, 1917, and an agreement was formulated under which 45 cents per ton was added to the price of coal to cover increased wages. The miners agreed "not to strike or cease working without cause," and the mine operators to refrain from lockouts. A penalty clause was adopted, enforceable against either mine owners or miners for infraction of the agreement. These penalties were fixed separately in each mining district by agreement between the operators and miners.

A special labor department was established to aid in the adjustment of differences, and, according to the report of the Fuel Administration, for the first ten months of its work, to the end of 1917, had averted strikes in a dozen different States.

Increased Production

The need for price fixing and settlement of strikes brought about the establishment of the Fuel Administration. The need for increasing production and stopping waste and non-essential use soon became its greatest task. In 1916, a year of unprecedented industrial activity, the total production of soft coal in the United States was 502,519,682 tons. This was about 60,000,000 tons more than was mined in 1915. In 1917, notwithstanding the diversion of labor by the draft and the stoppage of immigration, leaving coal operators short-handed, 554,000,000 tons were mined. In a pamphlet issued by the Fuel Administration August 1, 1918, when the war activities were at their height, the quantity of soft coal needed from April 1, 1918, to April 1, 1919, was estimated by the Fuel Administration at 735,000,000 tons, of which 100,000,000 tons would be drawn from the anthracite fields. In other words, substantially 80,000,000 more tons of soft coal were needed for war industries and transportation than were mined in 1917.

Transportation

The limiting factor in coal production in 1917 had been transportation even more than labor. During the latter half of the year, railway congestion blocked the movement of coal. The United States Geological Survey's reports showed a total loss of production of 34,992,680 tons in the period from August 18 to December 29, due to car shortage. The condition grew rapidly worse toward the end of the year. In the week ending December 15, 4,506,135 tons of possible production were lost through failure to obtain cars at the mines.

This was while the railways were still under company control. No wonder the Fuel Administrator said in his annual report:

The Fuel Administration views with the greatest satisfaction the appointment of a Director General of Railways, in whose hands is concentrated the power to utilize the railways and their equipment to an extent impossible to several lines separately managed.

The year 1918 opened with the worst railway congestion ever known, while for two months the most severe winter weather for a century blocked railway operations to an extent without precedent. Coal scarcity prevailed over a large part of the country during the winter and spring. Relief of congestion came with summer; and coal production then reached records never before approached. In April and May the output of coal was 63 to 77 per cent of the total capacity. In the nine weeks from April 1 to June 2, the average reduction of production (below 100%) was about 26 per cent, of which car shortage caused 13 per cent, labor shortage 5.8 per cent, mine disability 3.2 per cent, lack of orders 1.6 per cent and all other causes 2.4 per cent. Of course, conditions varied greatly in different districts. In some localities car shortage reached 50 per cent to 60 per cent.

In the week ending June 8 a great improvement appeared. The output rose to 82.3 per cent of the total capacity, or 12,427,000 net tons. Car shortage dropped to 7.8 per cent; lack of orders fell below 1 per cent. In order to reach the output of 634,594,000 tons, estimated as the requirement for the year from April 1, 1918, to April 1, 1919, the deficient production during the first two months made necessary an average weekly output of 12,400,000 tons of coal for the rest of the year. This record was reached during June and July, notwithstanding the decrease in mine labor due to the call to the colors.

In this estimate of 635,000,000 tons as the required output, allowance was made for the reduction in use by a countrywide campaign for economy and for the restriction of nonessential industries. The table reproduced on the following page is an analysis of the country's coal requirements made by the Fuel Administration on June 6, 1918.

This table is an interesting illustration of the way in which systematic statistical work was applied in the operation of government control. For the first time it became possible to direct an entire industry from a central authority. This made possible among other things some remarkable econ-

omies in distribution. In the United States, as in Great Britain, it was found that coal was being shipped needless distances. Some markets were supplied from a distant source to the neglect of a nearer one.

The prevailing competitive system and the railway rate structure is planned to give the distant producer a chance in each market.

Necessary as this is when competition alone governs price, it has no justification when the government fixes the prices. In March, 1918, the Fuel Administration, in cooperation with the Director General of Railroads, established a zone system to cover the distribution of soft coal. Shipments of 2,000,000 tons of Pocahontas coal to Chicago, with an average haul of 660 miles were stopped and Chicago had to draw from the Southern Illinois coal field, 330 miles away. The Wisconsin market was forced to give up its Kanawha River coal and draw from nearer fields. These are but a few examples of many such changes made in the distribution of coal. Not only was useless hauling saved, but release of cars from useless hauls made them available for mine supply, and thus added to the total tonnage output

CONSUMPTION OF COAL IN THE UNITED STATES FOR VARIOUS PURPOSES DURING WAR YEARS

Class of use	Required 1918-19	Consumed 1917	Per cent increase
	Net tons	Net tons	
Industrial.....	249,025,000	204,907,000	18
Domestic.....	75,678,000	66,915,000	13
Gas and electric public utilities.....	37,941,000	33,038,000	15
Railroads.....	166,000,000	155,000,000	7
Exports.....	24,000,000	24,000,000	..
Beehive Coke.....	52,450,000	52,450,000	..
Bunker—Foreign.....	10,000,000	7,700,000	30
Bunker—Domestic, inc. Great Lakes.....	5,000,000	5,000,000	..
Power and heat at coal mines.....	12,500,000	11,000,000	14
Substitution of coal for oil, mainly in the Northwest.....	2,000,000		..
Totals.....	634,594,000	560,010,000	13.32
Deduct: Imports.....		907,000	
“ Used from storage.....		4,375,000	
Net tons of production.....	634,594,000	554,728,000	14.4
Increased requirements over 1917.....		79,866,000	14.4

possible. The diversion of 2,000,000 tons of Pocahontas coal from Chicago, for example, made possible an additional output of at least 700,000 tons of Pocahontas coal.

A great deal was accomplished in stimulating the production of more coal by fewer miners. Systematic encouragement to miners to make large outputs and to hold in abeyance custom and traditions and union regulations limiting the output was notably successful. Machine mining had made possible enormous outputs. The Fuel Administration, in a bulletin issued August 1, 1918, noted the record of a miner in the Bliss Colliery of the Lehigh & Wilkesbarre Coal Co. In a single month he mined 350 mine carloads of coal and removed 58 cars of rock, and his total earnings were \$350.

A "production committee" of six men in each mine, three chosen by the mine operators and three by the miners, had for its duties to urge all to work to the best of their ability and make full time, to keep track of individual workers, and to report short hours or absentees.

Restriction of Consumption

There has been little criticism of the work of the Fuel Administration in its control over prices and production, but restrictions on the use of coal for nonessential industries caused widespread protest, as was to be expected. The policy here, however, was not to wholly stop an industry classed as nonessential, but to place it on short rations of fuel. This was not so much of a hardship as might appear, because such industries were generally making goods for which the demand was light, and their supply of capital and labor was depleted as well as their supply of coal. Among the industries thus restricted were brewing, clay products, manufacture of pleasure automobiles, florists, window glass making, and musical instruments. Use of coal or fuel oil in private pleasure yachts and use of any fuel by country clubs, except wood or peat hauled without railway transportation, was wholly cut off.

The campaign of education to prevent waste was well planned and had undoubted good results. A very large pro-

portion of the coal mined is wastefully burned. Because of her very cheap fuel, America has been always the worst sinner of all nations in this particular. Waste benefits no one, and with the much higher scale of fuel prices which are a certainty of the future, greater economy in the use of all fuel is imperative.

Heatless Days and Lightless Nights

The acts of the Fuel Administration, which were of the least consequence so far as fuel saving was concerned, caused more discussion and criticism than all its other acts combined. These were the orders establishing "heatless days" and "lightless nights."

The heatless days were an outcome of the coal famine in the winter of 1918, when unprecedented severe weather combined with railway congestion created a situation of grave public danger. There were 250 ships laden with war materials tied up in port for lack of fuel. Street railways and electric lighting plants were scraping the bottom of their coal bins. Private consumers and whole towns and cities were clamoring for coal. By order of the Fuel Administration all business not absolutely necessary in connection with the war was ordered suspended, so far as use of fuel was concerned, from January 18 to January 22, and on Monday of each week following. Eight such "heatless days" were observed. The actual amount of fuel saved was not great; yet at the end of the five-day period of business suspension, every ship of the 250 held in port for lack of coal had filled her bunkers and gone to sea, and towns and cities where coal famine had prevailed had been supplied.

Of equal value with the coal directly saved was the forcible impression made upon the public as to the great need for economizing in fuel at every point and increasing its production.

The "lightless nights," when all unnecessary street lights and advertising signs were discontinued, had a similar value. It was not merely the amount of coal saved by the reduced consumption of current for blazing street lamps and signs;

the very absence of these signs advertised to everyone that a national emergency called for economy by every patriotic citizen in the use of fuel.

Looking back on the work of the Fuel Administration, there is no escape from the conclusion that its work was a necessary contribution to the part of the United States in the war. It was not necessary here to take any such drastic measures as were required in France and Italy, where coal for domestic heating was cut down to an almost unbelievably low point in order that the war industries might be supplied. In the use of fuel, as well as food, government control of the private consumer was exerted in the form of moral suasion and appeals to patriotism, rather than outright compulsion. The result obtained justified this method; and for his entire work as Fuel Administrator President Garfield deserves a much larger measure of public credit than he has generally received.

CHAPTER XII

Some Unforeseen Results

THE WAR AS A STIMULANT TO INDUSTRY

The careful student of government control of industry during the war can not fail to note that one reason why that control was accepted so readily was not alone because of the great wave of patriotic sentiment which swept over the country but because of the amazing prosperity which the war brought to almost all kinds of business.

A graphic revelation of this is given in a curious little book, written by a British manufacturer in 1916. He is so delighted with government control of industry as it applies to his own business—apparently an iron working shop under the control of the Minister of Munitions—that he rushes into print to praise the operation of government control and to urge that it be adopted as a permanent policy!

One can read between the lines just the type of man the author is—a representative of that sturdy, conservative, slow thinking John Bull, so well depicted in the pages of George Eliot and Charles Dickens.

This manufacturer plaintively recalls his troubles before the war. He had to have a selling department working hard to get orders and taking them under sharp competition, which kept down his profits so that he could only pay low wages. Even then his business was often slack. His workmen were constantly bothering him with demands for higher wages or new shop rules to restrict output, with threats of strikes in the background.

And now, behold, what a change! The government keeps him busy with all the orders his plant can possibly fill. His employes are turning out work at a rate never before known. They are getting higher wages than ever before, but the government pays prices which permit this wage and leave him

a fair profit. He is not one of the men anxious to reap a sudden fortune; his ideal is a safe, easy going business that will relieve him of worry and give him a comfortable income. And government control has realized this ideal for him. Loss of orders, bad debts, protesting workmen, even difficulties in the purchase of raw materials—all these anxieties, which once so interfered with his digestive process, are happily ended.

"Why then," says John Bull, "since it is demonstrated that government control is so beneficial, should we not continue it after peace comes, instead of returning to that beastly old system of competition, where one had to be worrying about so many things, don't you know?"

This is all very amusing to an economist; but it is not at all improbable that the expressions above quoted represent the views of a good many people. The war was the greatest stimulant to industry and production and trade that the modern world has ever known. It is human nature to enjoy the effect of a stimulant and to overlook the depression that has eventually to follow stimulation.

Probably many other men besides the John Bull whose sentiments are depicted above confused the effect of the war as a stimulant with government control that distributed that stimulant to labor and industry and transport and distribution, so that all should have a portion.

Many other men with greater insight than John Bull are sure to ask whether some of the beneficial results that did follow, first, from the great stimulation and, second, from the exercise of government control, can not be attained for the benefit of the world in time of peace.

It was a revelation of the world's surplus production capacity, of which no one ever dreamed, that for five years the population should be able, while still supplying its daily necessities, to spare so many millions of men to carry on the work of killing and destruction.

Suppose that this huge surplus capacity of labor and machinery had been applied for five years, not to the work of

destruction, but to works for the benefit of mankind—to the building of ships and railways and roads; of houses and stores and factories and schools; to the drainage and irrigation of waste lands; to the planting of forests and the fertilizing of barren soils; to works for the higher development of the race, through religion, art, literature, education.

Had the labor and machinery and raw materials, so lavishly poured out to effect destruction in the war, been applied to work for the benefit of mankind, there would have been the same great beneficial stimulus to labor and industry that the war brought, and great strides forward would have been made in the enrichment of men's lives, the world around.

We all know now that one of the underlying causes of the war was that supply had outrun demand. Great industrial nations were eagerly competing for the world's markets. In 1913 and 1914 many hundreds of millions of dollars worth of ships and factories and mines and machinery in Europe and America, and hundreds of thousands of workers were idle for lack of a market for their product.

And yet human wants are well nigh limitless. If the competitive system can not find a way whereby it can utilize the surplus producing capacity of the world, then there will sooner or later be an insistent demand that government shall establish a control over industry which will enable idle labor and idle machinery to be set at work. If it can do nothing else, it can supply the needs of those who, because of their poverty due to lack of employment, have not been able to purchase goods.

THE EFFECT OF GOVERNMENT CONTROL ON COMPETITION

The operation of government control during the war has rendered more acute the problem of monopolies. The war has greatly stimulated the development of trade combinations to limit competition. Before the war, the Sherman Law, although largely ignored, was ever in the background as a specter that might make trouble if the limitation of competition was too open and flagrant.

When government control was established, the trade asso-

ciation, which had been hitherto either an outlaw or an object of suspicion, became at once a valued aid of the government. It was entirely natural, and indeed necessary to prompt action, for the government bureaus, in dealing with a specific trade, to go direct to the representative associations of the trade and to use them as a direct means of reaching the scattered members.

One chief object of trade associations is to limit wasteful practices resulting from competition. Since the stopping of all waste in war time was a paramount necessity, the very government which a short time before had frowned upon such acts as criminal, now joined to aid the culprit trade association in promoting just the acts which had recently been accounted unlawful.

There is no question that those engaged in the same trade have come to know each other better in the past four years than ever before. They have learned how to cooperate with each other, to cut out wasteful competition; they have learned how to operate and adjust fixed scales of prices to suit varying conditions and locations. They have learned how to act together in dealing with labor, with the purchase of raw materials, with the distribution of product, with the conduct of "drives."

All these things have been done openly, with the encouragement and even at the request of the government. They will not unlearn these things now that the period of government control has passed and an era of free competition is supposed to be reestablished. Nothing is more natural than that the experience of the war in limiting competition should lead those who practiced it then to continue to practice it now. Indeed, it is not at all improbable that a considerable part of the great rise in prices since the armistice is due to the action of the trades who during the war learned how to control competition better than ever before.

It must be remembered, however, that the cooperative action of the various trades and industries during the war was not wholly bad by any means. Waste benefits no one. More

intelligent study has been given to the problem of preventing waste in a hundred different industries during the past five years than ever before. Enough has been learned to point the way to the saving of hundreds of millions of dollars worth of labor and material annually which now go to waste. But, in order to actually make this saving, continued cooperation of the members of a given trade will usually be essential.

The problem is, how can this cooperative action be secured, and the individual members still maintain active competition with each other. A solution is far from easy. Some prominent public men go so far as to declare that the day of free competition is passed. If that be indeed so, then the day of uncontrolled private enterprise is past also. It is unthinkable that the public will long submit to paying the prices fixed by monopolies for its food and clothing and other necessities. Government control will have to be established over industry and trade, as it has been over all public utilities, if and where industry and trade succeed in establishing a monopoly able to exact tribute from all.

CHAPTER XIII

The Popular Verdict and the Truth

If the question were asked, was government control of industry during the war on the whole successful, the answer of the typical business or professional man would be in the negative. The "bourgeois" and the "intellectuals"—to use terms which are now becoming familiar—are well nigh unanimous in condemnation of the way the government's business was carried on, and their condemnation is very apt to be expressed in lurid terms.

The situation has been well summed up by saying that the present public sentiment is conservative. It demanded the return of the railways to private ownership, and would hear nothing of proposals for reforms which might avert a later swing of the pendulum to outright government operation. In Great Britain, Parliament rejected by an overwhelming majority the proposal for nationalization of the coal mines, even though that policy had been recommended by a government commission.

These are merely typical illustrations of the swing of public sentiment toward conservatism.

The public sentiment thus expressed is the dominating sentiment. Labor and the socialists and the farmers may hold more radical beliefs and in a voting test might far outnumber the conservative element, but the latter holds the position of influence and leadership.

The facts set forth in the preceding chapters point to the conclusion that in its estimate of government control of industry during the war the ignorant and radical majority is nearer right than the intellectual and conservative minority. Government control of industry as a war measure was far more successful than the intellectual public realizes.

This is not by any means saying that its continuance under

peace conditions would be beneficial or advisable. That is an entirely different question.

This is not saying either that there were not grave defects, waste, loss and even outright graft in the government conduct of operations. Such things occurred under the United States Government in the World War, and under every other government; they occurred also in works carried on by private enterprise. There is no defense for such things; but as preceding chapters have made clear, the government's work must not be judged on the basis of 100 per cent efficiency. War work was all emergency work. Saving time and not saving money was the essential of success. Time to create efficient organizations was not to be had. Those on whom the responsibility was laid had to go ahead with such men and materials and tools as could be had.

There is no need of reciting further the conditions already reviewed in previous chapters, which hampered not only government control of industry itself, but industry conducted wholly by private enterprise, and would have hampered it whether the responsibility had been in the hands of Republicans or Democrats, of a captain of industry or a labor leader. The fact to be emphasized is that no fair judgment can be formed of what government control effected without taking these limiting conditions into account.

But it may well be asked, how is it that the popular verdict of the thinking, intelligent people of the United States is so mistaken? Doubtless many, perhaps the majority of those who read this, will be unconvinced that the author can be right against this apparently overwhelming agreement of popular opinion. It seems worth while, therefore, to examine the basis on which this popular verdict has been made up.

(1) The failure to make allowance for conditions of the war emergency has already been alluded to. Few men are such careful thinkers as to take this into account in forming their opinion. They hear of some case where a government bureau made a decision that turned out wrong or was guilty of some neglect that resulted in heavy loss. They do not stop

to inquire whether the man responsible for the blunder may not have been the best man obtainable at the time, or whether the mistake would not have been equally likely to happen in a private business.

(2) Again, most men form their opinions on public matters from their newspaper reading and most influential newspapers are notably on the side of conservatism. Nor is the editorial attitude of newspapers the most influential factor. The newspaper publishes sensational attacks on public officers, or instances of failure and loss and mismanagement. These make a good story, worth large type headlines on the front page. There is no news whatever in the record of good work well done. Thus the man who "reads only head-lines and forms his opinions thereby—as a vast number of people do—has to live with some very badly warped opinions.

(3) There is no doubt that partisan sentiment, often entirely unconsciously, has shaped the popular verdict condemning government control.

The phenomenon of a Presidential administration waning rapidly in popularity as it draws toward a close is no new phenomenon in American politics. On the contrary, it has been the invariable rule for a generation.

The American people always expect their executives to be supermen; and are always disappointed when they finally learn that they are fallible and prone to error like the rest of mankind. Partisan critics of an administration can always make a far greater impression than its defenders. Besides this, no one feels any particular responsibility for defending the organizations which exercised government control. They have been broken up and scattered; there is no one in authority to speak for them. Republican orators may make good campaign capital by dilating on the failings of these war bureaus; and it is well nigh useless for the Democrats to reply. A dozen will be impressed by and remember the attack, where one could recall the refutation.

(4) The reaction after the war manifests itself in many ways. The American people, like the rest of the world, are

tired of war. From a glow of patriotic enthusiasm over the exploits of soldiers and sailors and the government, it has swung to the other extreme of critical fault finding. It is as ready to magnify the faults and blunders of 1917-1918 as it was to condone them at the time. Thus the politician who arraigns the government for interfering with private industry during the war meets general applause and the public accepts his statements without question.

(5) Because government control of industry during the war is conceived to have been an entering wedge for socialism, a vast number of excellent people are ready to condemn that control offhand. The revolution in Russia, with the development of Bolshevism there, the heavy tide of social and economic unrest with its strikes, syndicalism and anarchism sweeping all over Europe and the United States, have generated a great wave of conservatism—a demand for law and order that is evident all over the United States and also in Great Britain. This conservative sentiment has no patience to inquire which of the reputed 57 varieties of socialism the government control of industry which was exercised during the war may represent, or even whether it had any real relation to socialism, properly so called. This conservative sentiment would go the limit in wiping out all government interference with industry, and is in no mood to give fair examination to the record of what actually happened under war control.

If the above is a true picture of the state of mind on which the present widespread condemnation of government control of industry during the war is based, the reader may perhaps conclude that the author's generally favorable verdict on this control may have a sound basis, even though it runs counter to the popular verdict.

CHAPTER XIV

Inevitable Extension of Government Control

As recited in the previous chapter, it is popular just now to condemn government control of industry and to declare that its exercise during the war was so faulty that the public will have no more of it, but demands freedom from all restrictions upon business. One sees expressions of this sort almost daily in the public press and many people honestly believe that they hold such opinions. And yet, when a concrete case, instead of an abstract principle, is involved, the trend toward the steady extension of public control over industry appears as irresistible as the movement of a glacier.

A notable illustration is furnished by events in the railway world. An overwhelming public sentiment decreed that the government should turn the railways back to the owning companies. The newspapers have been filled for a year with denunciations of the government control exercised during the war, in large part, as has already been shown, without justification. The superficial reader might have supposed that the public desired the roads to go back to the companies on some such limited basis of government supervision as prevailed twenty years ago. But everyone directly concerned with the railway problem—not only the national legislators but the railway officers themselves—knew that was impossible.

The executive control by the government over the railways ended on March 1, 1920, but in its place the Cummins-Esch Law established an authoritative supervision by the Interstate Commerce Commission far more drastic and rigid than that which the influence of President Roosevelt put in force in 1907, when the Hepburn Law was enacted. What an avalanche of malediction from the railway and financial and business world that legislation brought down upon President Roosevelt's head! In 1920 the same railway and financial

and business world accepts the Cummins-Esch Act, establishing the Interstate Commerce Commission in supreme authority over the railways, with approbation instead of protest!

One should not be deceived, therefore, by the current published invectives against government control. They remind one of the school boy who at the end of the term flings his textbooks on a bonfire and holds a revel over the cremation. What the textbooks contained remains with him nevertheless.

The people of Great Britain and America in their reaction from war's restrictions, are in a mood to condemn that control which saved the nation's life, and declare that they will have none of it in peace times. But the lessons the war has impressed on us will not be unlearned.

Perhaps the greatest economic lesson the war has taught is how inadequate and inequitable the fixing of prices by the law of supply and demand becomes when one party is under pressure of absolute necessity, and either supply or demand is limited. This principle has been slowly working its way toward recognition all through the development of the modern industrial system. The object lessons of the past five years have done more to establish it in economics and sociology and jurisprudence than all the events of the preceding half century.

The establishment of government control over such natural monopolies as public utilities was fully accomplished before the war, but the great majority of people wished to stop there and refrain from interference with other industries. The war has demolished this halting place. The public is as bitter today toward the profiteers in food and c'othing and houses as it was toward the railways a generation ago. No government can be or will be deaf to appeals for relief from the rapacious landlord or the meat packer and distributor or the maker of shoes. No government can or will refuse to act when deadlocks in fuel production or food supply endanger the state.

Government control of industry is very imperfect of course; as is everything which human and imperfect men carry on, including industry itself. There will be general agreement

among all conversant with the problem, too, that wherever industry can function efficiently and justly without government interference and with satisfaction to both producers and consumers, it may well be let alone. But when the machine runs badly, where the industry becomes prostituted as a means to exploit producers or consumers or those who carry it on, then an appeal for government interference will inevitably arise, and the experience in the World War has made it certain that in some way control on behalf of the public will be established.

There is no doubt that government control is far from ideal in its operation and that the special circumstances of the war, as has been fully explained in previous chapters, made the control then exercised especially faulty in many ways. That is no reason for its rejection when necessity compels; and the logic of necessity will compel its gradual extension in the future as in the past, no matter what political party may rule.

Men and women who look with understanding eyes on the great social and economic problems of the time see clearly the necessity of meeting the increasing power of business and class organizations with an increasing authority of the government, representing the whole people, to protect the public interest.

There is no more important task imposed on this generation than the overhauling of our government organization and methods so that it may become more efficient, not for the purpose of extending the field of government control, which is already enormous in extent, but that whenever and wherever that exercise of government control becomes necessary, it may be exercised efficiently.

CHAPTER XV

Conflict Between the Executive and the Legislative Branches of Government

"The principal good which humanity will get out of the war will not be a victory of Democracy over Prussianism. It will be a victory of Democracy over its own weakness." These were the opening words of an address by Dr. Frederick Cleveland before the American Academy of Political Science at a national conference on war economy on June 5, 1918. Dr. Cleveland's thesis was that inefficiency and waste in our governmental affairs are not necessary features of a democratic form of government; but are due to the lack of proper organization in our governmental machine. He said:

Our weakness and our wastefulness have not been democratic. We Americans have been institutional anarchists. Our institutions have been built with the purpose of making our Executive weak. We have designed an irresponsible system of administration with a view of fostering "pork barrel" politics, with all its accompanying wastefulness. In our political philosophy we have been Bolsheviks. True, we have not stood our officers up in line and shot them, as did some of the Bolsheviks of Russia; but we have been just as wasteful of experience gained in the management of our affairs.

Dr. Cleveland, who was chairman of the Commission on Economy and Efficiency created in President Taft's administration, urged in the strongest terms the necessity of making our government machine efficient by strengthening the authority of the executive and confining Congress to its true function of dealing with broad questions of public policy.

The fierce controversy over the exercise of government control of industry during the war has such a close relation to this vital question of our governmental organization that further discussion here seems necessary.

THE ATTACK ON THE PRESIDENT AS AN AUTOCRAT

In the *New York Sun*—that joyfully virulent critic of President Wilson—there appeared on January 19, 1918, a remarka-

ble arraignment of the President's assumption of autocratic powers in control of industry during the war, under the title, "What One Man has Taken on Himself to Do."

The editor began by quoting from an address by President Wilson, just before his inauguration, in which appeared an oratorical flourish condemning the concentration of power in government.

The editorial then proceeded to categorically enumerate the powers which had been concentrated in President Wilson's hands, under the authority of and "with the practical abdication of Congress." The catalogue may be briefly summarized as follows: (1) "He has undertaken to be not only the executive administrator of the laws enacted by Congress, but the fountain-head of legislative policy, the dictator of his political party's creed, the inspirer and leader of public opinion for the whole country." (2) He has taken control of the food production and distribution. (3) He regulates the supply of food to the Allies and the neutrals. (4) He has taken control of fuel. (5) He has become the nation's price fixer. (6) He regulates the sumptuary affairs of the nation. (7) He has absolute control of the entire railway system. (8) He has control of American shipping and has undertaken, "under the compulsion of manifest necessity," to create a merchant marine. (9) He has undertaken to plan federal taxation and expenditure. (10) He is financing the Allies' military operations. (11) He is "getting ready to undertake the regulation of the issue of new securities by every private concern for the money market." (12) He is reported as proposing further war legislation authorizing government control of *all* necessities and their production and price. (13) He is formulating the ethical principles and political considerations that should determine the hereafter of the international structure. "His words on these extra-constitutional subjects command respectful attention wherever civilization has ears to hear."

The editorial concluded as follows: "This process (of concentration of powers in the Executive) if continued into times of peace, means also the destruction of that government of

distributed powers which the founders of the Republic defined in the Constitution."

The above quoted editorial is typical of a long continued campaign of criticism which has had, without doubt, an enormous effect on public opinion. The animus of this criticism is in a large part personal. Every President of the United States draws down on himself, as his administration draws toward its close, an avalanche of bitter personal denunciation, coming usually from all the members of the opposition party and a large part of his own. President Wilson, however, has created more bitter personal enemies than any President since Andrew Johnson.

Partisan feeling accounts for another large part of the criticism. It has been considered good Republican politics to exploit such criticism as the *Sun* editorial above. The result has been that the Republican party has been led, merely through its attitude of opposition, into the position of supporting Congress in its antagonism toward the Executive. The result has been a deadlock in our governmental machinery that has paralyzed a large part of the work of reconstruction and prevents the nation's effective participation in international affairs.

CONFLICT BETWEEN CONGRESS AND THE PRESIDENT NOT NEW

There is no intention here to discuss either personal or partisan aspects of the question, but it is proper to point out that antagonism between the executive and legislative branches of the government is no new phenomenon in American government. At the close of the Civil War it played a large part in the attempted impeachment of President Johnson by members of his own party. President Cleveland's administration was so unpopular with members of his own party, as well as with the opposition, that the public business was seriously obstructed. The most popular President for a generation, Theodore Roosevelt, was during the latter part of his administration so bitterly opposed by the Congress in

which his own party held a majority, that a recommendation from him for a measure was sufficient to condemn it in the eyes of Congress.

These historical facts are only cited here to clear away the common delusion that the defects in our government machine are going to be removed either by eliminating the personality of Mr. Wilson or transferring control from the Democratic party to the Republican party, or any other.

No one can study with open mind the experience of the United States and of Great Britain in the government control of industry during the war without being convinced that that control was absolutely essential to the war's success and, further, *that concentration of power in the Executive was essential for successful control.*

EXPERIENCE IN THE REVOLUTION

The United States has had experience in the operation of government without an executive. The nation was born at a time when men's minds were dominated by antagonism to the autocratic government of the King and the Colonial governors and they organized a government consisting of a legislative body only—the Continental Congress. The wonder is, as one reads the history, that the War of the Revolution was not lost a dozen times over—as it repeatedly became near being, from the incapacity of the Continental Congress. Not that its individual members were incompetent or unpatriotic, but the inevitable inability of such a body to exercise executive functions drove General Washington repeatedly to the verge of despair.

The years which followed the Revolution, when the government of the nation in the time of peace was attempted by Congress, acting through committees, proved that even for the simple and primitive requirements of government at that day, executive powers were necessary.

It was in the light of that experience that the Constitution was framed and a separate executive department was created; but the division of authority between the executive

and legislative departments was left undefined, opening the door thereby for future controversy and deadlocks between the coordinate departments of the government.

THE SPANISH WAR EXPERIENCE

We do not have to go as far back as the Revolution by any means to find positive proof of the necessity of a strong central executive authority in time of war. The Spanish War was fought by the United States only a score of years before it entered the World War. And what a carnival of inefficiency it was! The task of 1898 was a mere trifle to what faced the nation in 1917. Shafter's expedition to Cuba mustered only 17,000 men; President Roosevelt himself, then a responsible member of the Administration, has told how ludicrously and lamentably the government of that day failed to care for its army and provide it with the things necessary for its work.

Why did the federal government in 1898 fail so completely compared with that of 1917? It was not because President McKinley was inefficient compared with President Wilson. It was not because a Republican administration is less efficient than a Democratic. It was because the army in 1898 was controlled by a dozen different, independent, jealous bureaus, between whom there was no cooperation, each of them existing by authority of Congress, and so protected by statute and precedent that the Executive himself was unable to establish a unified control. Dr. Cleveland, in the address above referred to, says of that dismal record of monumental inefficiency in the Spanish War:

In violation of the spirit of the Constitution, and of every ideal of democracy, Congress had taken to itself control over each bureau of the administration; had taken the initiative and the leadership that belong to the Executive in any scheme of responsible government; had taken over this initiative and dealt it out in sections to over a hundred different standing committees who, sitting behind closed doors, became both the real Congress and the real head of the administration.

This was the institutional provision for leadership that existed at the time of the Spanish-American War. And it still exists—exists not alone in the national government but in most of our State governments as well.

* * * * *

The Wilson administration has done much to overcome institutional weakness. Lack of team work? Yes—of the same kind that we have had for decades—the kind that Mr. Taft tried to overcome all through his administration. Inefficiency? Yes—the kind that goes with our system. It is a tribute to American manhood and American citizenship as well as to the Wilson administration that so much has been accomplished—that the confusion and waste has not been much greater. Only a few days ago was Congress driven by the necessities of war to give to the President the power to reorganize bureaus and departments in a manner to make them effective. But note the reservation. It was done with an apology and a promise that after the war is over we will return to our good old ways by again taking the initiative out of the hands of the Executive and putting it back into the hands of a hundred or more irresponsible committees of Congress.

THE DANGER IN PRESENT ANTAGONISM TO THE EXECUTIVE

What happened in the war is past history. From one point of view it may seem to matter little to the American people how government control of industry operated during the war; but if through misinformation the American people are led to condemn the concentration of power in the Executive that made our success in the war possible and to oppose provisions for making the executive branch of government more efficient, it will be a matter of most serious moment.

We should surely be able to deal with this important matter more wisely than any previous generation, for the science of organization has made great progress in the past dozen years. It is elementary knowledge now that a legislative body can not possibly perform executive work. The United States Senate can not negotiate a treaty any more than the board of directors of a corporation could arrange the details of a contract. Further, the experience of the war has demonstrated anew that where authority over executive work is given to a committee or commission it should confine its work to deciding the broad questions of general policy and delegate to an individual official the authority to carry out this policy and decide on all matters of detail.

It is true that President Wilson's unfortunate tendency to make the concentration of authority in the Executive a matter of his single personality has tended to confuse the issue and make those who contend for the supreme authority of Congress seem to be in the right. This temporary condi-

tion should not, however, lead us to reject sound principles. The government of the United States is by far the hugest business organization in the world. Steadily the inexorable logic of events forces it to assume new and larger tasks. It is of great importance to the public welfare that this government business should be efficiently performed. Especially is this true when the work consists of control over private industry.

It is therefore a work of the highest patriotism to seek to build up in our government a strong executive organization clothed with full authority for efficient operation and yet subject itself to such control through Congressional enactment as will prevent abuse of power.

Those who have given most serious study to our government operations realize that we can only hope for progress through changes in organization and in methods. Without these, changes in personnel can effect little. The framework of our government, bequeathed to us by those who adopted the Constitution, was only a framework after all. Those who drafted it had not the remotest dream of the social and economic conditions under which the nation is today living. We are unworthy descendents of those great men if we are unwilling to face the task of adapting the government they established to the conditions and needs of today.

BIBLIOGRAPHY¹

- HOWARD L. GRAY. *War Time Control of Industry*. The Macmillan Co., 1918.
- ROBERT AND KATHERINE BARRETT. *British Industrial Experience During the War*. Senate Document No. 114, 65th Congress, 1st Session—two volumes.
- Economic Mobilization in the United States for the War of 1917*, Monograph No. 2, Historical Branch, War Plans Division, General Staff.
- War Department Document No. 885*. Office of the Adjutant General, Washington, D. C.
- The United States Food Administration and the United States Fuel Administration*. 65th Congress, 2d Session, Document No. 837.
- Fuel Facts*. U. S. Fuel Administration, August 1, 1918.
- War Industries Board, Priorities Division*. Circular No. 20, September 3, 1918.
- Directory of War Industries Board*, September 1, 1918.
- Report of the War Trade Board for the period ending December 31, 1917*.
- Rules and Regulations of the War Trade Board*. No. 1, November 19, 1917; No. 2, May, 1918.
- War Trade Board's Part in the War*, New York Times Magazine, January 19, 1919.
- Mobilizing America's Man Power*. Committee on Public Information, Bulletin No. 34, July 29, 1918.
- Trading with the Enemy* (Law of October 6, 1917, with synopsis). Guaranty Trust Co., New York, 1917.
- Food Control: A War Measure*. U. S. Food Administration, Bulletin No. 15.
- THOMAS H. DICKINSON. *A Year of Food Administration*. North American Review, July, 1918.
- HERBERT HOOVER. *The Dairy and the World Food Problem*. U. S. Food Administration, June, 1918.
- United States Shipping Board, 1st Annual Report*, December 1, 1917.
- Shipping Facts*. (Revised to September 1, 1918.) Information Bureau, U. S. Shipping Board.
- United States Railroad Administration, Public Acts*. Proclamation by the President Relating to the United States Railroad Administration and General Orders issued by the Director General of Railroads to July 1, 1918. Bulletin No. 4.

¹ There are of course a very great number of official reports of similar character to those listed above. These named in the list above are merely documents which have been found particularly useful by the author in collecting the material for this monograph.

INDEX

- Adamson law, 43.
- Baruch, Bernard M., 92.
- Bonus, war, to British railway employes, 39.
- Building, restrictions upon, 92.
- Cables, ocean, control of, 67.
- Capital, control of, 91.
- Carnegie, Andrew, 20.
- Central control of railways necessary, 46.
- Central authority, necessity for, 28.
- Clayton Act, 83.
- Cleveland, Dr. Frederick A., 128, 132.
- Coal: control of fields by Germany, 104; protest against government interference in coal industry, 105; control of prices by Great Britain 105; British coal controller, 106; government ownership of mines, 107; control of prices by United States, 108, 109; stimulation of production, 110; distribution in United States, 112; record production by coal miner, 113; consumption in United States, 112; supply to nonessential industries restricted, 113; nationalization of coal mines, 121.
- Collective bargaining, largest on record, 43.
- Commissions, public utility, conflicting views concerning, 4.
- Competition: breakdown of competitive system, 22; eliminated in railway service, 35, 49, 59; in telegraph service, 67; in shipping industry, 70.
- Conscription of labor, 82.
- Conservatism, reaction toward, 121.
- Contracts, cost plus a percentage, 78.
- Control, government: faults in, due to necessary haste, 27; conflicting opinions on, 121; reasons for erroneous opinions, 123; extension of, inevitable, 125.
- Council of National Defense, 29.
- Cummins-Esch Bill, 125.
- Defense, Council of National, 29.
- Dickinson, Thomas H., 102.
- Director General of Railways, 47.
- Economical Operating Unit, size of, 13.
- Efficiency: in government operations, 10; three conditions necessary to, 12; standard of measuring, 13; why necessary to watch, 16; in railway service, 58.
- Eight-hour day for railway labor, 40, 43.
- Electric railways, condition of, 55.
- Emergency Fleet Corporation, 77.
- Emery, James A., report on labor conditions, 89.
- Employment Service, United States, 87.
- Executive: necessary reliance on Executive Department for efficiency, 32; conflict between executive and legislative departments, 39, 128; concentration of power in, essential, 131; lack of, in the Revolution, 131; lack of concentrated authority in Spanish War, 132.
- Exports, limitation of, as a war measure, 73.
- Food: government control of, 94; campaign to effect saving, 96; volume of exports, 99; food bill of nation, 1917-1918, 100; Lever Bill, 101; licenses for dealers, 102.
- Fuel, control of, 104.
- Garfield, Harry A., 115.
- General Staff, necessary to supersede Bureau system, 28.
- Gompers, Samuel, 86.
- Heatless days, 114.
- Hoover, Herbert, 94.
- Imports, restrictions on, 74.
- Industrial system, changes in, necessary, 9.
- Industry, stimulation of, by war, 116.
- Insurance, marine, written by British Government, 71.
- Interstate Commerce Commission: rate case, 45; recommends government operation, 46.
- Labor: control of, by Great Britain, 25; control of railway employes, by Great Britain, 37; strikes on Western Union telegraph lines, 68; government control of, 82; British coal industry, 107; in United States coal mines, 109.
- Laissez faire theory of government, 5, 21.
- Lane, Franklin K., 18.
- Legislature and Executive, conflict between, 123.
- Lever Bill, 101.
- Licenses for food dealers, 102.
- Lightless nights, 114.
- Lloyd George, David, 26, 31, 105.
- McAdoo, William G., 47, 57-58.
- Merchant marine, argument for American, 76.
- Ministry of Munitions, Great Britain, 31.
- Mobilization, Great Britain, troop movements by rail, 35.
- Monopoly: in buying, 59, 98; effect of war conditions in stimulating, 118.
- Municipal ownership of utilities, 64.
- Munitions, manufacture of, in Great Britain, 22.
- Ocean freight rates, sudden rise in, 72.
- Organization: of nation's industries, 17; time necessary for efficient, 19; need of radical changes in, 134.
- Over-capitalization, 57, 59.
- Patriotism, relation of, to success of government control, 33.
- Ports, control of vessel handling in, 74.
- Power distribution under government auspices, 64.
- Presidents: always unpopular near close of term, 123; assumption by President Wilson of autocratic powers, 129.
- Price fixing: becomes necessary in Great Britain, 24; by Food Administration, 97-98; war experience set precedent, 126.
- Priority, determination of, made necessary by price fixing, 24.
- Production: volume of, dependent on efficiency, 11; capacity of modern industry revealed by war, 15, 117.
- Profiteers in retail trade, 126.
- Profits, equitable distribution by rationing, 24.
- Public utilities in United States, 61.
- Railways: control of, in Great Britain, 34; competition eliminated, 35, 49, 59; war bonus, 39; government ownership in Great Britain, 42; control of, in United States, 43; profits of, in United States, 44; central control necessary for war, 45; government control

- not actually tried, 48, 56; director general of, 47; average annual earnings of employes of, 50; wages paid by, compared with cost of living, 51; efficiency of labor, 53-54; rates not raised high enough, 55; Wage Board, 47; excessive salaries paid to presidents of, 58; efficiency of, 58; Cummins-Esch Bill, 125.
- Rate fixing in franchises, proved unwise, 61.
- Rationing: in British munition industry, 23; of textile materials in Great Britain, 75; of food, why not adopted in United States, 95.
- Restriction of output in textile industry, 75.
- Roosevelt, President, and Hepburn law, 125.
- Sailors, effect of U. S. law establishing rights of, 76.
- "Service at Cost" plan for public utilities, 65.
- Shipbuilding: government action to stimulate, 74; race against German submarines in United States, 77, 80.
- Shipping: control of, by Great Britain, 70; controller of, Great Britain, 74.
- Ship subsidies, United States, controversy over, 75.
- Stanley, Sir Albert, 41.
- Street Railway Commission, Federal, 66.
- Strikes by government employes, 38, 42.
- Supply and demand: abnormal conditions due to war, 23; failure in labor market, 84; supply in excess of demand as cause of war, 118.
- System necessary in all large business, 14.
- Telegraph and telephone, control of, 67.
- Thrift, government encouragement of, 91.
- Trade combinations, fostered by war, 119.
- Traffic, railway, war time restrictions on, 37.
- Value of the dollar, 44, 61.
- Wages: low standards of, in Great Britain, 39; increase in railway, actual and relative, 49.
- War bonus, to British railway employes, 39.
- War Industries Board, 30, 92.
- War Labor Board, 87.
- War Risk Insurance, 71.
- Waste, lessons of war in eliminating, 119.
- Welfare work by government in Great Britain, 26.
- Wilson, President Woodrow, 30, 128-130.

444

1900

11 83

CAP
UNIV

PLEASE DO NOT

tion of industry in Great
ring the world univer
York etc., Oxford univer
17 economic studies of the war,
at for international peace. Divi
omic aspects—Gt. Brit. 2. European
-U. S. 3. Industry and state—Gt.

21-8883

1. Title.
HC56.P7 no. 18
HD5616.U47B3

CKET

RY